AMERICAN BANKING

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H. PARKER WILLIS, Ph. D.

Secretary, Federal Reserve Board; Former Associate Editor,
New York Journal of Commerce; Former Professor of
Finance and Dean, College of Political Science,
George Washington University.

La Salle Extension University

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CHAPTER I

MODERN BANKING FUNCTIONS

A London financial expert soon after the passage of the Federal Reserve Act wrote these significant words:

> The act is a bigger thing by all odds for the world's trade than the Panama Canal. The passage of the measure was a greater discovery than half a dozen African gold fields.

That striking statement with reference to one aspect of banking emphasizes the tremendous force and power of banking in modern economic life. Recent experiences have awakened keener public appreciation of the fundamental problems in banking. Finance in all its relations is very intimate to all of us. Business men are seeing more clearly the business services which a good banking system is capable of rendering them, provided it is used intelligently and understandingly, and the nation as a whole, after many bitter experiences with an inadequate and archaic banking machinery, has awakened to the national and international importance of a scientific money and banking system.

Banking from whatever aspect it is approached is interesting, fascinating, and romantic. Whether we consider the magnificence of certain banking buildings, the almost incomprehensible figures of banking statistics, or the fortunes of individual bankers who have won world fame and distinction, there is much to arouse the imagi-

nation of one who is deeply interested in modern business and finance. Yet banking is to most people a closed book. Banking operations run a mysterious course of their own and are little understood even by those who are dependent upon banking services. Both business and the banks themselves suffer from this lack of exact knowledge on the subject.

Banking functions may for convenience be considered from two points of view, though ultimately and finally the two interests merge into each other. These two interests are those of the individual as a user of banking services and of the bank as an institution in our economic system.

Services to the Individual

The individual as a customer of the bank sees problems primarily from the point of view of his own personal interests. He thinks of the bank as a place for the safe-keeping of money and other valuables. When he needs additional funds he goes to the bank for loans, or discounts there commercial paper that he may have in his possession. By means of his checking account he uses the bank as a convenient and safe paymaster. He deposits his drafts, checks, coupons, and other valuable papers with the bank, which then acts as a collection agent in collecting these, often without charge, from their various sources. He seeks banking advice and services in making investments, in deciding upon business policies, in obtaining credit information, and in many like affairs of business. A good banking connection and the ability to use it effectively are positive assets to the business man.

Economic Services of Banks

The foregoing are the more obvious functions of a bank, but these could not be performed in an efficient

manner without an understanding of the nature of a bank and its economic functions in modern society. According to some writers on banking, the earliest idea of the bank was that of a safe place of deposit. Persons having valuable goods, coin, bullion, precious stones, etc., desired to find a place of safety for them and so took them to an institution whose duty it was to safeguard the property. Later, it is said, these institutions began to make loans and to state the value of these loans in terms of a uniform currency. Functions of exchange were taken up, bank notes were issued, and gradually the first primitive banks were developed into something resembling the institutions of today.

It is of no immediate importance whether the historical and antiquarian accounts of the origin of banking are correct or not. The bank of today finds its reason for existence in conditions of commercial life which have only incidentally to do with the question of uniformity of currency or the safe-keeping and storage of money and valuables. Like many another institution, the bank has developed far away from its earliest origins, and now finds its principal function in the performance of duties which at the start were a minor part of its work or were not even recognized at all.

Banks of today may be divided into several great classes, such classification being based upon principles which will presently be indicated, but throughout all runs a single dominant idea or function. This function is that of supplying credit in some form or other to persons who need it. Or, to state the thought in another way, it is that of guaranteeing the limited or individual credit of each individual by accepting it and substituting in lieu thereof the bank's own credit. When an individual takes his own secured note, for example, to a bank,

discounts it, and then draws checks against his account at the bank, he has simply substituted the bank's credit of more general acceptability for his own credit of limited acceptability. The discount which the bank retains is the value of this service to him and is the price he is willing to pay for it. The bank thus appears as an institution for the study of credit and for guaranteeing its judgment on that subject.

WHAT IS CREDIT?

The definition of the bank thus given depends upon the definition of credit. There has been a great deal of more or less abstract speculation about credit and its nature. We shall not endeavor to go into this controversy, but shall content ourselves with merely stating some generally accepted facts about credit and its relation to banking.

By a credit transaction is meant one which is not finally closed, there remaining a future payment to be made on one side or both. X may obtain goods from a retail shop-keeper "on credit." This means that the shop-keeper has supplied the goods to X without receiving money in payment, trusting X to pay him at some time in the future. He may, however, have received X's note for the amount, in which case the transaction is based on credit just as truly as if no such note had been given. The transfer of the note places the shop-keeper in a somewhat better position for the purpose of collecting the obligation when it is due, but the essential nature of the transaction is the same in one instance as in the other.

In a similar fashion, if A and B are shop-keepers side by side, and each buys goods of the other, no money

passing and the transactions occurring at irregular dates, what has really happened has been an exchange of goods against goods. If A had exchanged 100 pounds of leaf tobacco against an equivalent quantity of grain, the transaction would not have been of a credit character but a plain case of barter, in which the transaction was finally closed by the transfer of the goods on either side and the corresponding receipt of the goods for which the trade was made. In the case of the two shop-keepers, each of whom buys from the other goods whose value is stated in terms of money, without matching goods against goods, credit has been used to offset the transactions against one another so as to be final, but this is possible partly because the exchanges have been based upon a scale or level of prices previously fixed by the community at large.

Going a step further, we may suppose that neither of these shop-keepers pays money and that neither expects to liquidate the indebtedness by matching accounts with his customer. Each pays the other from time to time by giving him a claim upon some third person or institution who owes both. Such claims, being of known goodness, are readily accepted. This introduces a new factor into the situation and suggests one way in which the bank becomes a party to commercial transactions.

It may be asked why either of the traders should want to fall back upon a bank in this way. That may be merely a matter of convenience. Neither of the men may care to keep actual money in his establishment and so may hand it over to the bank and transfer title to it as he sees fit by means of a check or credit instrument. In such a case the bank would be merely exercising its primitive function as a place of safe deposit.

Credit Function of the Bank

But this in the commercial world would be only the unusual case. Individuals would not, in practice, keep sums of money idle in banks. Nor is it true that, under modern conditions, every man could carry on all his business through the agency of actual money whether he handled it himself or left it with a bank and transferred the title to it on paper.

In order to render possible the commercial transactions of the present day, what is needed by the ordinary trader is a means of making clear to his creditors the fact that, at some time in the future, he will undoubtedly be able to control money, the universal medium of exchange. If he owned a stock of universally desired commodities, he might liquidate his obligations by giving written claims on such commodities to his creditors. No such commodities, except money, exist, and what he needs, therefore, is the guarantee of some authorized and known person or institution that he can, upon due notice, convert the wealth he owns into money or its equivalent. If he can go to a bank and make a showing of assets to that institution such as to convince it that he controls goods or property to the amount that he wants to borrow plus an ample margin of safety to guard against depreciation, the bank will usually be willing to take his "note," which is a legal lien against his property, and to give him in exchange the right to draw upon it, agreeing to pay at sight the obligations that may be presented to it for cashing, in money.

This is a much more complicated type of credit transaction, since it involves not merely an exchange of goods against goods, both being stated in terms of money, or an exchange of goods against the personal promise of an

individual to pay at some time in the future, but essentially an exchange of credit against credit. More than 90 per cent of the business in this country is transacted on a credit basis and payment is effected through a great process of bookkeeping between individuals, banks, communities, and nations. The convenience, safety, and economy resulting from the settling of commercial accounts by means of offsetting credits is a large item in commerce.

The classic enumeration of banking functions describes them as those of "discount," "deposit," and "issue." By "discount" is meant substantially what the average man understands by loan. By "deposit" is meant the acceptance of actual funds from persons who leave them with the bank, or the crediting on the books of the bank of specified amounts of funds for which the "depositor" has left security in lieu of which he has been authorized to draw a given amount. By "issue" is meant the actual printing and paying out of bank notes, which are pieces of paper authorizing the holder to demand from the bank a specified amount of money. As a matter of fact all these functions are really parts or aspects or methods connected with a single function—the extension of credit. In the further study of these different banking functions one should never lose sight of their relations to the central idea of a bank as a credit-extending and credit-guaranteeing institution.

TEST QUESTIONS

1. From what two points of view may banking facilities be considered?
2. What is the chief economic function of banks?
3. What is credit?

4. How does a bank convert the credit of an individual into the credit of a bank?

5. From the standpoint of credit, compare an open charge account of a merchant with an account for which a note has been received.

6. Explain: "More than 90 per cent of the business in this country is transacted on a credit basis, and payment is effected through a great process of bookkeeping between individuals, banks, communities, and nations."

7. What are the three basic functions of banks?

CHAPTER II

CLASSES OF BANKS

We have spoken thus far as if the "bank" were a universal type of institution belonging to a single homogeneous class, and to the casual observer, perhaps, banks do not differ. They all seem alike. This is not the case. Banks are as highly specialized and as highly organized as any other institutions of the commercial world. Their classification may be founded upon either of several lines of distinction. A clear conception of the several classes of banks will facilitate greatly an understanding of the various banking functions about to be considered.

The bank may be in the habit of extending credit, or as the phrase goes "making loans," or "lending money," for long periods or short periods. On the basis of this distinction, institutions may be classified as commercial or non-commercial banks, the commercial banks being those which engage only in short-term transactions growing out of industrial and commercial business, while non-commercial banks operate chiefly in the investment field.

Banks may confine their attention to a particular kind of loans or to loans made to a particular class of borrowers. In this case there is a true example of specialization, often for the sake of greater efficiency and speed in judging certain classes of paper. Banks may be grouped according to the laws under which they are organized and the functions which they are allowed to exercise by virtue of such laws. Sometimes they are

classified according to the habits they adopt with reference to reserves and the like. A good many other modes of classification might be suggested, but there are only two that need particular attention here. These two are the grouping of banks according to their legal status and the grouping according to their economic or commercial or financial status.

Legal Status of Banking

There is no reason why the business of banking should not be undertaken by a single individual acting for himself, just as he might take up any other kind of business. Some of the most successful bankers in history have been individuals who thus conducted operations on their own responsibility and with their own capital. But the great importance of banking in modern times has led to the passage of laws under which the creation of banks and the conduct of banking is very carefully supervised, while the large capital that is needed in the business and the desirability of co-operation in carrying the enterprise on have made it advantageous for several persons to unite. The result of this has been that most banks today are organized either (1) under special charters passed by legislative bodies or (2) under general legislation applying to banks as such. Such legislation may originate with any grade of government which is competent to grant authority for incorporation.

Banks of the first class mentioned are best exemplified by the great chartered institutions of Europe. These institutions operate under acts granting them special powers and defining what their functions and duties are, as well as the extent to which they shall be subject to control by the state. Some of them are allowed monopolies of various banking functions, such as that of note

issue. In the United States, banks of this description were created under the laws chartering the First and Second Banks of the United States in 1791 and 1817 respectively.

The second class of banks, organized under general legislation permitting any group of persons to engage in the business under specified conditions, is seen in the case of the institutions which exist today in the United States. The national banks of the United States are created under an act of Congress known as the National Bank Act, originally passed in 1863 and later modified, which specifies the conditions under which such institutions may be organized and which indicates their relationship to the federal government and the powers of control to be exercised by the latter.

Practically every state in the Union has also a banking act of its own which permits the organization of banks amenable to the state authority and to no other. These are known as "state banks."

Beside these institutions, there have been organized in the several states others that do a true banking business although they occasionally combine it with business of other descriptions. Thus in many states are found so-called "loan and trust companies" organized under laws of a special character. "Savings banks" are also found, organized either as stock companies or as "mutual" institutions. Building and loan associations organized under special laws exercise certain banking functions of a particular kind. There are insurance companies also which perform some functions of the same sort, and banking duties have occasionally been taken over by businesses whose principal occupation is not that of banking but is wholly apart from it. Instances of this sort are seen in the department stores of our larger cities,

some of which have established "banking departments" for the sake of facilitating the credit operations of their customers.

National Banks

The class of institutions upon which the interest of the student of banking in this country is chiefly concentrated is that chartered by the federal government under the National Bank Act. A more complete description of the working of this system will be afforded somewhat later. It is desired at this point merely to sketch certain salient aspects of it.

The national banks belong essentially to the type called "commercial banks." That is to say, their operations are limited by law to those classes of transactions that are obviously short-term in character. The restrictions placed upon the conditions under which the national banks may lend and the kinds of security which they may accept, if rigidly observed, confine the banks to the commercial business of lending to persons who have live security and expect to pay at the end of thirty, sixty, ninety, or one hundred and twenty days.

These banks, owing to the provisions of the law under which they are organized, also represent the cash reserve or money reserve of the country, since they are required to maintain a specified percentage of their liabilities in the form of legal-tender money. They also have a special relation to the government in that they are examined by federal examiners and report regularly to an official called the comptroller of the currency whose office is a bureau in the Treasury Department at Washington. Moreover these banks issue notes and, owing to legislation designed for that purpose, state banks are practically prevented from performing this function. The

national banks, too, receive government funds on deposit under specified conditions and thus occupy an official relation to the Treasury Department.

The federal reserve banks are banks created by the joint contributions of other banks and are practically co-operative unions designed to make these other banks more effective in their operations. The subject is treated further in later chapters.

State Banks

The state banks are organized under state laws, generally in the way already pointed out. Such state laws are occasionally more or less close reproductions of the National Bank Act. In a good many states, however, the banking laws permit greater latitude to the banks organized under them in the matter of classes of business accepted, amount of reserves maintained, conditions of security to depositors, and the like. In some states, the examinations carried on by state bank examiners are lax and the banks are allowed to do very much as they please.

The best state banks compare favorably with the best national banks and, barring the issue of notes, they do very much the same kind of work, discount very much the same kind of paper, carry on their business in very much the same way, and are equally reliable.

The weaker state banks, organized in states where public supervision is at a low ebb, make loans upon less satisfactory security, and for longer periods, engage in classes of business that are not exactly within the province of banking in the best sense of the word, and in general represent a lower and less responsible type of institution than do the national banks. This does not necessarily mean that such banks are irregularly car-

ried on, but simply that their operations are not confined to the classes of business which we have already grouped as "banking" in the strict sense of the term, while the hazards and risks they incur are such as occasionally to give rise to well-grounded fears concerning their stability and solvency. They may, and sometimes do, perform a useful service in communities where national banks would find themselves very seriously limited and crippled in the classes of business they could accept and yet keep within the provisions of the banking law.

Private Banks

Private banks are unincorporated institutions that transact the regular banking business of deposit and discount. Two types of these institutions should be distinguished. Private banking firms such as that of J. P. Morgan & Co. are large financial houses engaged in promoting and financing enterprises, underwriting their securities, selling railroad and industrial bonds, making loans to city, state, and national governments, and transacting other important financial business. They usually receive deposits and may or may not discount commercial paper.

The other type of private bank is a survival of pioneer conditions. An individual or group of individuals simply open a banking business very much as they would open a grocery store. They then solicit deposits and make loans and conduct a general banking business, either by itself or in conjunction with some other business—real estate, insurance, or something else. No specific amount of paid-up capital or resources is required, and other canons of banking safety are not always observed. In large cities, especially, people of foreign descent have often been deceived by men of their own nationality who

have opened such banks, accepted deposits, and eventually absconded. The abuse of this system by unscrupulous enterprises has led many states to prohibit private banking altogether, and in other states such banks are placed under the same regulations and supervisions as incorporated banks.

Loan and Trust Companies

In the loan and trust companies, we have a type of institutions which are really supplementary to the bank as such. Organized under special laws, trust companies perform a number of operations which are not exactly banking, but are closely allied thereto. As their name implies, they are largely concerned with operations involving "trusts." That is to say, they act in a fiduciary capacity. They not only take care of securities and valuables, usually having ample and well-appointed vaults for this purpose, but execute individual trusts, act as executors, sometimes furnish life, title, and fidelity insurance, and do other things of the same nature. An important function in modern commercial life is that of trusteeship under corporate mortgages. Trust companies act as mortgagees in trust for bondholders, register bonds, collect the interest, pay the bonds at maturity, and take the necessary legal steps for protection of the bondholders in case of default.

In the course of these operations, such institutions are likely to have a good deal of ready cash on hand. Therefore, instead of depositing their investment funds in banks, most trust companies now carry on a banking department and receive deposits, make loans, and do other banking duties. In such cases, the separate departments are of course organized in order to take care of the different classes of business. It sometimes happens

that a trust company is primarily a bank, its other functions sinking into the background, while in some instances the banking duties are purely incidental to the others.

As a rule, the trust companies of the United States do not endeavor to keep large reserves of coin or currency, but deposit the bulk of their reserves with banks, either state or national, expecting these institutions to supply them with money when it is needed.

The advantages of the trust company are those which come from the combination of banking with trusteeship and the allied occupations, and the fact that the trust company is not hampered by the close restrictions which hedge about the banks and can therefore loan on long-period inactive security. The disadvantages of the trust company are found in the fact that it is not, and does not pretend to be, a commercial bank, while nevertheless the public, seeing it performing the superficial functions of banking, expects it to live up to the obligations of the bank in the matter of reserves, prompt payment, quickness of assets, and the like. The trust company, however, is not a bank although it exercises banking functions.

Savings Banks

In the case of the savings banks a still further variation is to be noted. The savings bank is what its name implies—a bank for savings. It seeks to collect small sums from persons who have accumulated them and then to use these funds in such a way as to make the greatest return consistent with safety. It emphasizes safety and fair interest returns as against ease of liquidation.

No genuine commercial bank should allow interest on deposits, although there are such banks which make a practice of granting interest on certain conditions. The trust company usually allows some interest on deposits,

and the primary purpose of the savings bank is not only the accumulation of savings and their safe-keeping but the earning of interest thereon. In other words, while the commercial bank is primarily organized for the purpose of making extensions of credit, and while the trust company in its banking function does the same, the savings bank endeavors to induce persons with small means to leave their funds with it to earn interest. The bank seeks to make a profit not by the extension of credit on short-time commercial security of the quickest or most salable character but usually by long-term loans, based perhaps on real estate, or through the purchase of very high-grade bonds or other securities yielding a fair interest.

The savings bank may be organized as a stock company like any other bank, in which case it allows interest to the depositors, invests the funds left with it to the best of its ability, and gives such surplus as there may be to its stockholders. Or the savings bank may be organized on a mutual principle under which every depositor becomes a sharer in the profits of the institution in proportion to the amount of the funds he has left with it. He is granted a rate of interest on his deposits which is fixed by a consideration of the net earnings of the institution after expenses of management, etc., have been taken out and necessary contingencies provided for. The savings bank, like the trust company, is likely to keep most of its spare funds on deposit with a commercial bank, which may or may not allow it a small rate of interest thereon.

Building Loan Associations

The building loan association is an institution of a special type which cannot be regarded as a bank but

which plays a certain part in the financial organization of the country and should therefore be noted. Its purpose is somewhat similar to that of the savings bank. It confines its loans, however, chiefly to real estate, and extends credit to individuals who want to erect homes or other buildings, paying for them gradually and in the meantime giving a lien on the property. Such associations, also, frequently make loans upon buildings which have already been erected, in order to accommodate the owners. Some associations aim to confine their loans to persons who are members of the association, while others do not require membership but are really institutions for loaning on real estate. Some of the associations obtain their funds gradually at so much per week or per month through the steady payment of specified sums by wage-earners who expect to receive loans for the purpose of erecting homes. While these savers are putting in their cash it is being used in loans to others, the security being the buildings erected by the latter. In this aspect, the building loan association is performing a function which approximates to banking.

Building loan associations usually keep their funds on deposit in banks when not in use, and may thus become a more or less important class of depositors at banks, representing as they do the combined means of many small savers. They may also obtain loans at banks on the strength of the securities they have, and thus they may become more or less important borrowers or clients of banks.

Insurance Companies

Originally, the insurance company was just what its name implies. It was organized for the purpose of carrying risks whether on human life, or on destructible

buildings and other property, or on titles. As the insurance company developed, however, it became an important agency for saving and investing funds. Many persons who take out life insurance policies do so not exclusively for the protection they are afforded but largely because they are guaranteed, or expect, a certain return at the end of a stated period—say twenty years. They thus find the insurance policy a convenient means of laying aside some savings which might otherwise go into immediate consumption. In the case of so-called "endowment policies" the saving may be considerably more prominent than the insurance feature.

The insurance company takes the premiums paid in on the policies, promises to pay a given amount in case of death, and undertakes to return at the end of a stated period a specified amount dependent perhaps upon its earnings in the meanwhile. It then undertakes to invest the savings that have been poured into its treasury. In doing so, insurance companies have of recent years become very large investors and at times usurp some banking functions. They become large purchasers of commercial paper, they deposit largely in commercial banks, and they buy largely of stocks, bonds, and other securities or lend largely upon them as collateral.

Insurance companies in the employment of their funds, therefore, take from the banks some of the business the latter would otherwise do, and at times stand to the borrower in very much the same relation as does the bank. This may be true as the result of a direct banking relationship or it may be brought about through the intermediation of a trust company or other concern, probably largely controlled by the insurance company; but the result is the same in one case as in the other, and in this aspect the insurance company must be regarded

as a factor of importance in the study of the banking situation of the present day.

NATIONAL BANKING SYSTEMS

In practically all countries it has been found that united action on the part of banks was from time to time needful for reasons later to be considered, and this fact has led to the organization in a more or less formal way of the banks of the several nations in some systematic manner. Looked at from this general point of view the banking systems of the world may be generally divided into three classes:

1. *The central banking systems,* so-called, of which the French system may be taken as a fair example. In these a central banking institution acts as the holder of reserve funds and usually as the sole issuer of notes for a nation. Such a central institution may have a good many branches or it may not. In either case it usually deals chiefly with other banks, leaving to these banks the business with individual customers. This latter point is not a universal characteristic, as seen in the case of the Bank of France, which loans to individuals in very small amounts. Whether it does its work through direct loans to individuals or through intermediation of other banks, however, central banks of the kind already spoken of, directly influence the market and practically control rates of interest.

2. *The independent charter banking systems.* Of these the Canadian is the principal example. The Canadian banks number about twenty-seven, and are nominally free competitors with one another, doing their work through the establishment of great networks of branches, interlacing throughout the community. Each of these institutions has the note-issue function and is

essentially a central bank in the sense that it controls a large reserve, issues paper currency, and is in position to shift capital from one part of the country to another. An added element of strength in the Canadian system is afforded by the fact that a joint guaranty fund, applying to the notes of all insolvent Canadian banks, is established.

3. *The independent competitive banking systems,* of which the American system is the principal. In the American banking system individual institutions have been chartered, as already noted, both by the United States and by the several States, subject merely to some general requirements. Under this plan practically anyone could organize a bank if he had the necessary capital.

TEST QUESTIONS

1. Distinguish between commercial banks and non-commercial banks. Can you give the name of at least one institution in each class?
2. In what different ways do banks specialize for the purpose of rendering efficient service to their customers?
3. Under what two legal plans are most banks organized today? What system prevails in your own state?
4. Why are national banks essentially "commercial banks"?
5. What are the two types of private banks? Do private banks exist in your state?
6. How does a private bank differ from a state bank?
7. What are the essential features of loan and trust companies?
8. Why should insurance companies be considered in a discussion of banking problems?
9. What are the three chief types of national banking systems?
10. What are the distinguishing characteristics of each system?

CHAPTER III

THE BANK LOAN

The making of a bank loan may be best understood by supposing the case of a borrower who presents himself at a bank. His application for a loan having been favorably acted upon, he may be allowed the amount he desires in any one of several forms:

1. A credit of the given amount may be allowed him upon the books of the bank.
2. His loan may be given him in bank notes.
3. He may be given the amount in legal tender money or currency.

In practice, the form of loan actually adopted will be one of the first two. That, however, need not detain us here. Supposing that the first form is adopted, the next step is to give to the bank some evidence that such a loan has been made and that the borrower is under obligation to return it at a fixed date, and to the borrower a statement that he has been granted such a loan and is authorized to draw upon the institution for the amount allowed him.

The borrower, under such conditions, will hand to the banker a form of "note" evidencing his obligation to pay. The banker will hand to the borrower a "pass book" with the amount of the loan, written in figures upon the appropriate page, to the borrower's credit. A like entry having been made upon the books of the bank, the transaction is consummated, and the borrower is at

liberty to use the amount thus credited to him as he sees fit. He may thereupon draw it out in cash or simply transfer to another his right to draw upon the bank for the specified amount. An order of transfer of this sort is called a "check." In either case, the credit thus granted serves the purpose of the borrower by enabling him to liquidate indebtedness falling due at once.

More Complex Transactions

Such simple forms of transaction occur comparatively seldom in actual practice. The bank does not always lend directly to a borrower who comes for a personal loan. Nor does it usually lend its credit with nothing except the general assurance that the borrower will return the amount. That type of transaction may suffice in cases where the borrower is exceptionally well known to the bank, or where his standing and solvency are above all question. But in the majority of cases such assurance cannot be felt, or, if it is, the banker does not care to hazard the property of the stockholders in his institution merely because he personally feels assured of the ability and intent of the borrower to pay at the time when the loan falls due. Consequently, there is usually a demand for some further assurance to the bank that the borrower will liquidate when the time comes.

Such assurance may be gained in one of two ways: (1) the borrower may associate with himself another signer to the paper or "note," thus giving the weight of two names to the paper; or (2) he may give the bank title to some piece of property of known value, thereby assuring it of the possibility of recovering its funds by sale of the property in the event of failure on the part of the borrower to redeem his promise—or, what is more to the purpose, assuring the bank itself of the borrower's

true purpose to redeem at the time set because of his loss, otherwise, of the property. Which of these modes of "securing" the loan will be employed in a given case will depend upon circumstances which it is now our purpose to detail.

The "Discount"

The personal type of security which consists of a note backed by two or more names may be created in one of two ways. A may ask for a loan at a bank and be refused in default of an indorser. He may go to B and ask the latter to join in supporting the note. This can be done by B's "indorsing" the note, an operation which consists in his placing his signature on the back of the instrument. In that event, B becomes liable for the amount of the note, should A refuse to pay it, and the bank may institute legal proceedings for the purpose of recovering from B should such action become desirable. The same would be true of other indorsers, if more than one were induced to attach his signature to a note. This type of commercial paper is often designated as accommodation paper. There is no certain way of knowing from the face of the note whether it represents a concluded transaction or an intended one.

Of more importance than such transactions is a second mode of securing two signatures. A may have bought goods from B, and not being able to pay in cash or bank checks for them, he may give B his own note for the amount. B, desiring immediate funds, may take this note to a bank and ask for a loan on the strength of it. The banker will then, if B's credit at the institution is satisfactory, or if the original maker of the note is known to him, take the note with the indorsement of B, and place the value of the paper to the credit of B.

In such a case, the operation is said to be a "discount" and the note is said to have been "discounted." The amount set to the credit of B is the face of the note less the interest on the sum for the life of the note and the difference or interest is called the discount. Discount is interest deducted in advance. If the sum is paid at maturity it is interest. The essence is the same.

Much of the bank paper of the present day is of this type, for in practice a large volume of goods is sold upon credit, while in order to get immediate funds the sellers of such goods demand and receive from their customers "paper" which can be discounted. The discounting of commercial paper is a link in the commercial practice of buying and selling on time. It enables a debtor to pay his debts as they fall due by realizing upon the amounts due him from other people.

Another Form of the Transaction

It is not necessary that the discount should be managed in the way, or assume precisely the form, that has just been indicated. Usually the paper which is created by buyers of goods and is by them transferred to sellers in order to enable the latter to get credit at their banks will be drafts or bills. That is to say, a sale of goods may be made without the signature of the buyer upon a "note." The buyer may give the seller the privilege to "draw" upon him at, say, sixty days. In that event, a "draft" is drawn by the seller of the goods. This is merely an order to the buyer to pay to a designated person or bank a specified sum after the lapse of the period for which the goods were sold. When this draft is signed by the drawer of the draft, it is sent through a bank to the buyer of the goods, who is then called the "drawee." If he writes the word "Accepted" across the face of the

from a bank for the purpose of completing the transaction. In that event he pays in his own funds as far as they will go, and then draws upon the bank for the additional amount needed to carry out the bargain.

The bank is thus practically joining with the buyer of the securities in the purchase. It is permitting him to use its funds for making his purchases up to a certain percentage of the value of the security. The funds of the buyer are invested in the security additionally, and constitute a "margin" of safety to the bank, which is supposed to be as large as the fluctuations in the worth of the stock or bonds will be under any probable circumstances. The buyer assumes all risk in one view of the case, while the bank supplies the indisputable value of the security. It has the advantage of placing its funds at interest while the borrower presumably protects it against loss due to fluctuations in values, and it is able to call in the loan at any time when the funds are needed in other directions. This works well as long as the suppositions on which it is founded remain true; i. e., as long as the security has a marketable value which is higher than the amount of the loan. Under special circumstances this may not be the case, and in such an event the bank finds its funds "tied up," since, owing to temporarily unfavorable conditions, it cannot sell out the stocks or bonds at a value which will reimburse it.

The same sort of loan may be secured upon goods stored in elevators or warehouses. The warehouse receipt is then attached to the bill of exchange.

Documented Bills of Exchange

A type of bank loan which combines some features of the collateral loan and of the personally secured type, is seen when credit is granted upon bills of exchange

secured by evidences that goods are in transit from one point to another. This type of loan, evidenced by what is known as a "documented bill of exchange," is especially common in connection with the operation which is known as "moving the crops," though there is a tendency to encourage its use in all commercial transactions.

The character of the business which produces a transaction of this kind may be understood from a brief outline of the circumstances. A, a cotton broker in Savannah, Ga., has consigned cotton of a given quality to some mills at Fall River, Mass., owned by B. He turns the cotton over to the railroad company consigned to B and receives from the railroad company a duplicate bill of lading which constitutes his receipt for the goods. It may be ten days or two weeks before the cotton is delivered to the buyer, B. A takes the bill of lading and attaches it to a draft or "sight bill" drawn upon B. He discounts this draft at his bank and the bank transmits it to a correspondent bank in Fall River which presents it to B for payment when the cotton is received. The bill of lading is not released by the bank until arrangements have been made by the consignee for paying the draft. A thus gets the advantage of the funds immediately, while the banks get the discount for ten days or two weeks as the case may be.

Documented Bills in Foreign Trade

Documented bills of exchange are used extensively in international trade, and in such trade the "documents" needed for the complete protection of the draft become much more numerous. Such documents include not only the bill of lading but also certificates of marine insurance, consular invoices, certificates of origin, and all other papers that are necessary to enable the goods to

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pass rapidly through the formalities connected with the custom-house administration in the countries to which the articles are sent.

In such foreign trade operations, the banks which handle the loan are enabled to make an additional profit, apart from the discount charged by them, inasmuch as they are also performing a foreign exchange transaction, in which the currency of one country is exchanged for that of another. Thus, if A in New York has sold a bill of goods to B in Hamburg, Germany, and discounts his claim upon B at a New York bank, the bank gives him credit in American dollars while the claim will be collected of B in Hamburg, through a Hamburg bank in German money, at an agreed-upon equivalence. This complicates the transaction to some extent and involves various modifications of the operation which may be better dealt with in connection with what we shall have to say of foreign exchange.

The security of the bank which discounts documented bills resides first of all in the fact that it is a party to a transaction in which valuable goods, usually of staple quality and consequently of known market value, are passing, and that it has the title to such goods in its possession. Obviously the persons who are conducting such a transaction, if it is bona fide, would not engage in it unless the goods were valued by the buyer and seller at the rate agreed upon. No doubt there might be a collusive arrangement between buyer and seller in which the goods said to have been shipped were not as represented or were not valued as highly as represented. The former question—the reality of the goods—is really tested by the railroad or other carrier who receives them, while the value of the goods, if staple, may be tested by the bank through market quotations.

There may, however, be a great many transactions in which the bank has no reliable means of actually testing the value of the goods, and in such cases it must rely upon what it knows of the man who secures the discount from it. This, however, is always a serious problem with the bank. Whatever the nominal security it has as an immediate protection against loss, its ultimate security rests upon the solvency and good faith of the borrower and hence the necessity of carefully testing his reliability, not merely from a moral standpoint, or in intention, but from a strict commercial standpoint as well. The person who discounts such bills, of course, holds a contingent liability until the amount is paid by the drawee.

Documented bills of exchange are much preferred among bankers to ordinary promissory notes because they reveal at once the purpose for which the loan is made, while a note does not show in what sort of a transaction the debt originated. Acquaintance with the principals in the transaction and a knowledge of the business which caused the obligation, obviously, are valuable facts for a banker to know in dealing with credit.

Bankers' Acceptances

Another type of bills of exchange may now be described. B, who buys goods from A, may find it to his advantage to induce his own bank to accept for him. That is to say, instead of accepting a draft on himself, he may have arranged with A, the seller, that a bank shall accept the draft presented. This means that the bank agrees to pay the claim when it falls due. Of course, the bank will then collect from the buyer of the goods who has induced it thus to stand in his place, or, what amounts to the same thing, it has arranged with the buyer that he shall pay in the amount of the claim to it

on the date when it is due, so that the transaction merely amounts to the buyer's meeting the claim at his bank on the specified date. This is a banker's acceptance. The bank in this case has substituted its security for that of the buyer of the goods. He may have left with it securities sufficient to indemnify it in case of his failure to pay, or may otherwise have protected the institution.

It is clear, however, that A, the seller of the goods, will find it much easier to dispose of this banker's acceptance than to discount or sell that of the buyer individually. Indeed, the banker's acceptance may be so good that it can be sold without any indorsement or undertaking. It is equivalent to a time draft on the bank which has accepted it so that A, the seller, may not need to go through the process of discounting with his bank, indorsing or guaranteeing the amount of the loan, or otherwise binding himself.

This is commercial paper of the purest type. It grows out of a commercial transaction and it is liquid in the highest sense because it is the obligation of a bank. On the face of any such transaction it is probable that the operation is a commercial one. It may, of course, have been undertaken for some purely financial purpose, but in this case, as in others, it is possible to make sure that the transaction is commercial by specifying or identifying the goods on which the acceptance is based. The status of bankers' acceptances under the federal reserve system will be explained shortly.

TEST QUESTIONS

1. In what three forms may a borrower secure a personal loan at a bank?
2. What two ways of giving security on bank loans are most common in commercial practice?

3. Explain bank discounts. What determines the rate?

4. Explain the use of drafts in commercial transactions.

5. What is a collateral loan? How is it secured?

6. What is a call loan, and how is it used in commercial affairs?

7. What are "documented bills of exchange"? Give a concrete example showing how to use them.

8. Explain bankers' acceptances. How are they used in business transactions? What advantages do they possess over some other types of loans?

CHAPTER IV

SPECIAL PROBLEMS IN LOANS

Testing the Borrower

Banks have various ways of testing the solvency of their borrowers for the purpose of determining their title to credit. At some banks, it is still the custom to have borrowers make up a statement of assets and liabilities when asking for a large loan, or if they are regular borrowers, constantly in need of accommodation, and as constantly repaying it, so that they have a regular line of trade at the bank, to require them to make regular statements of condition to the officers of the institution. These statements may be made semi-annually, or quarterly, or even monthly, according as the officers of the bank deem best, and as the activity of the business of the borrower seems to require. Evidently a borrower whose business was rather sluggish, would not have to be called upon to make such statements as often as one who did a large business, made immense profits, or incurred heavy losses, through the rapid turnover of his capital in business transactions. Figure 1 shows a typical statement.

The banker, himself, especially in small towns, has a very fair idea of the character of the operations in the business of his customers. His customers are likely to make a confidant of him to some extent and by knowing the amount of capital they control and the volume of their receipts as deposited with him, he gets a good working knowledge of what they are doing without being

STATEMENT OF........

BUSINESS..............

TO...................

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and give other materia
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ASSE

statements by

DATE OF PARTNERSHIP............................

GENERAL PARTNERS

NAME	Amount Contributed.
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If the firm or any member is connected with any other
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What is the practise of the firm in regard to trade disco
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Location and Description of Land Ow

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Title. The legal and equitable title to all pieces of abc
of the firm, except as follows.............................
....

usually do, exhibit not merely the character of the assets and liabilities but also the degree of their liquidity and many other important considerations.

Besides this, the credit department of a large bank will want to be informed concerning a number of points which in the small local institutions are obtained through the immediate observation of the officers and directors of the bank. The firm's standing in its own line of business, the character of its management, the promptness with which it pays its debts, and a variety of other circumstances will all figure in this connection. The banker himself cannot get this information directly, and usually derives it from credit agencies or through concerns which make a business of ascertaining all the facts that can be learned with regard to different concerns, arranging these in their proper order, making them serviceable to students of credit, and supplying them in condensed form, for a consideration, to those who want them. Taking such statements in conjunction with the information derived from the borrower himself, supported by the examination of the certified accountant, the credit bureau of a bank is able to pass with great certainty upon the quality of the paper presented to it for discount.

Buying Paper

Careful study of credit becomes specially important when, as is often the case, the bank finds itself with idle funds which it cannot employ in its own locality. It frequently happens that a bank finds its vaults full of funds while it is unable to loan further in the community where it is situated. This inability to loan may be due to a superabundance of capital or to lack of enterprise on the part of the community, or to lack of openings for new investments. Whatever the cause may be, this is an

unsatisfactory condition for the bank and makes it necessary that the institution should find an outlet for its funds elsewhere.

Such an outlet may be found by the bank through a redeposit of its funds with some other bank which is willing to allow an interest thereon. In that event the funds continue to be available on call, but the rate of interest earned is usually low.

Or the bank with surplus funds may loan them in a distant market on collateral security—an operation which usually means that the funds are employed for stock market speculation.

Conservative banks, which have large surplus funds that can be counted upon for some months in advance and which are able to gauge the borrowing demand of their communities with some accuracy, prefer to use such excess funds in buying paper issued by firms outside of their own immediate range of custom. By buying such paper they secure a loan of greater stability and permanence than they would by placing their funds on call secured by stocks or bonds, while the loans yield them a much better interest than they could usually get by redepositing their funds with some other bank. For this reason investment in good sound paper is much favored by bankers of the conservative type and the question is merely that of testing the paper and of getting hold of it through some recognized channel.

The bank which thus places its funds abroad has not always the facilities for testing the paper nor has it the regular communication with borrowers who want funds from outside their locality. Such borrowers, however, exist in large numbers. They may prefer to place their paper very widely for convenience' sake, or because they would rather have it scattered through a great number

of banks, or because they can thus get a lower rate of interest, or for any one of a variety of reasons. It is enough to say at this point that there is a supply of such paper seeking a market throughout the country, and that there are banks with surplus funds which they would like to invest.

"Rediscounts"

Therefore rediscounts

One means of bringing together the distant bank and the distant borrower is seen in the "rediscount." A city bank may have on hand a quantity of good paper in which its funds are temporarily "tied up." It does not question the goodness of the paper but it may see an opportunity for investing its funds at a much higher rate of interest. Or it may find that some one of its old borrowers needs substantial assistance and yet it may not be in a position to make further loans to him in the existing state of its liquid resources. Under such circumstances the bank may deem it advisable to get rid of a part of the paper which it is carrying among its assets. Or such a bank may be well aware that other banks at a distance will come to it for loans or investments for their surplus funds, and so it may keep itself stocked up in advance with rather more paper than it would otherwise think best to carry.

Under such circumstances, suppose an out-of-town banker to make application to it for paper. It may be very glad to transfer some of the investments with which it is over-supplied, charging the new buyer a small per cent for the accommodation afforded him in giving him a good investment for his funds. The out-of-town banker will be glad to get the paper for the reasons already noted, and for the further reason that, in buying such paper, he has a tacit guarantee, if not an explicit one, of

the goodness of what he buys. In the event of difficulty in collection, the bank from which he purchased will assist in getting in the funds, while in any event the institution which originally took the paper has subjected it to its own test. So the local banker feels an added sense of security in making the purchase. The reverse of the transaction occurs when the bank desiring to get funds in place of investments offers paper to another bank with its own indorsement and is credited with the proceeds.

Such transactions are called "rediscounts." Transactions of this kind are made continually to a very considerable extent and are beneficial, not merely for the reasons of convenience already set forth, but because they aid in redistributing the capital of the community to those points where it is wanted, while placing the investments of the country at those points where investments are wanted.

Rediscounting under the Reserve Act

The Federal Reserve Act was designed to facilitate this process of rediscount. It provides for the discount of notes, drafts, and bills of exchange growing out of commercial, industrial, or agricultural transactions, and also bankers' acceptances. It, however, limits the bankers' acceptances which can be discounted, to those based upon the importation or exportation of goods. This limitation is imposed in order to avoid an undue development of the acceptance business on the part of banks which might not be of the highest degree of solvency, or might have embarked upon an acceptance business to too great an extent in proportion to their resources.

The Federal Reserve Act also provides that there may be bought in the open market, subject to prescribed regu-

lations, bills of exchange and bankers' acceptances. In framing the bill it was originally intended to include notes, so that the open market transactions would have been upon the same basis as the discount transactions, the difference between the two being that in the latter case the paper would have been protected by the indorsement of a member bank, while in the former case, such indorsement would not have been required. Before the bill finally came to a passage, however, it was determined to omit notes on the ground that the purchase of single-name paper of this kind in the open market might expose the banks to some hazard. Since they would not be in as good a position to judge the paper as the member banks themselves, they might from time to time take paper which was not thoroughly satisfactory.

purchase only bills of exchange & bankers acceptances

What has been said makes it plain that only a part of the paper held by the rank and file of the banks is eligible for rediscount with federal reserve banks and that only a part of the paper currently sold in the open market is available for purchase by such banks. A member bank may have loaned funds to a merchant in order to enable him to extend his business. It may be well aware when the loan is made that the merchant intends to enlarge his building or to construct a new one, or it may have made the loan for the purpose of enabling an individual to purchase stocks and bonds and hold them in the expectation of the advance in their value; or it may have advanced funds for the purpose of enabling the borrower to invest in real estate and await an advance in the value of land. Good banking practice does not permit the making of any loans of this sort on long terms. Stock loans are usually made on call—that is to say, payment may be demanded whenever the bank desires. Other loans of the kinds referred to may be made for periods of four or six

months, with the understanding that they will be renewed for another four or six months. In some parts of the country there is a good deal of such paper in banks.

The Federal Reserve Act expressly permits certain classes of national banks to loan 25 per cent of their capital and surplus upon notes running not to exceed five years in all, secured by farm lands. The purpose of this provision is to enable banks to lend to farmers who can offer land as security, but who are practically unable to offer any other security and who need funds to carry on their operations for a long period. Such loans, however desirable they may be, and however sound they may be, are not of a commercial type. They are non-liquid in the sense that they run for relatively long periods.

Moreover, in those parts of the country where such loans are common, it is likely to be true that the maturities of the loans cannot be distributed—i. e., that many loans will fall due in about the same time. The effort of the bank which is lending on short term in ordinary commercial business is to distribute the maturities as much as it can, so that there will be a steady stream of maturing notes throughout each month. This gives the bank a regular flow of funds back into its vaults, and it can use its own judgment about letting them out again. The other classes of loans are of an entirely different type. There is no way of distributing them well, and consequently no way of collecting steadily and readily. Banks which make such loans must, therefore, count upon having to carry them until maturity. They will not find it easy to rediscount them, at least until they approach maturity. Neither can they be sure of inducing the borrower to pay at maturity, because in such long loans his ability to liquidate probably depends upon the success of some enterprise in which he has been engaged in the

meantime. In order to protect itself, the bank may be practically driven to renew such loans, or even to increase them.

In every bank which does a commercial banking business, however, there will be found a large element of paper which is of pure commercial type. If this were not true, the bank would not be a bank in the proper sense of the term. Every bank, therefore, may be said to have two distinct classes of paper, one commercial and the other non-commercial,—the former available for rediscount with federal reserve banks, the latter practically requiring to be carried until maturity and constituting an investment of longer or shorter duration.

F.R. Banks will rediscount commercial paper.

Commercial Purpose of Loans

It has already been stated that in those cases where the borrower goes direct to his bank and secures accommodation upon his own note, whether protected or unprotected, there is nothing in the transaction itself to show whether the purpose of the loan was commercial or not. For this reason, it has sometimes been suggested that it was the intention of the Federal Reserve Act to confine the discountable and eligible paper to that which bore two names—those of the buyer and seller, as already described. Such a proposal was considered at one time while the Act was in process of preparation, but the plan was rejected, as is shown by the language of the law which describes the eligible paper as that whose proceeds have been used or "are to be used" for the purposes specified in the Act. This, however, necessitates some investigation on the part of the bank which originally discounts the paper, as to the genuineness of the commercial purpose which is alleged by the borrower at the time he gets the loan.

How can the bank inform itself on this point?

In small communities, or where the borrower and all his operations are absolutely known to the bank, it may be sufficient for the borrower simply to state his purpose. The bank, after placing the funds to his credit, can tell in a general way by the character of the checks that he draws what the funds are being used for.

In most cases, however, particularly where loans are large, the bank gets its information by obtaining from the would-be borrower a statement of his condition, of the kind already described. This statement shows the value of his business, the amount of short-term assets it holds, the quantity of goods ready for market, the long-term obligations it has outstanding, such as bonds, and the amount of bills payable or short-term obligations which must be met within a specified period. Such a statement form is shown in Figure 1.

How bank tells of borrowers' financial conditions

The question whether the business is liquid or not is determined by making a comparison of its short-term or immediate resources with its short-term or immediate liabilities. If there is a substantial surplus of the former over the latter it is in a liquid condition. It will be noted that this liquid character is only indirectly related to the solvency of the business. A business might conceivably be in a very liquid condition and yet insolvent, in the sense that its total assets were less than its total liabilities. On the other hand, the business may be highly solvent but very far from liquid. Its funds may have been allowed to become "tied up" in long-term operations, so that it is in want of immediate funds for actual current necessities.

From the banker's standpoint, the question whether a loan to a commercial firm on the single-name paper of that firm is desired for a commercial purpose, depends

largely upon the degree in which the assets of the concern are liquid. If they are not very liquid it is fair to assume that the loan is practically equivalent to supplying the concern with more capital, which is to be steadily required in the business until it can put itself upon a more liquid basis.

The point at issue here can be understood by considering one or two illustrations. A borrower, for example, may givê absolute evidence to the bank that a sum of a thousand dollars which he is borrowing is to be used in a strictly commercial transaction and yet this knowledge may show nothing whatever of the borrower's general policy, because it may be necessary for him to use a similar amount of his own current receipts for purposes which are practically equivalent to the investment of more funds in his business. The real test is whether the aggregate of the loans and receipts of the concern are intended to be used for, and are in fact used to anticipate, income from the claims that will mature within a short time. If such is the case, the concern is in a liquid condition and its paper may fairly be discounted as commercial paper. Of course this test is a somewhat general and uncertain one, and in applying it the judgment of the bank which makes the loan must be the principal guide.

Single-Name v. Double-Name Paper

Relatively little such single-name paper exists in foreign countries. The course of banking in the United States has, however, been such as to develop single-name paper to an unprecedented extent, the makers dividing their obligations among a great number of banks of relatively small capitalization. This is the case with some of the great borrowers of the country. Their paper is made

in notes of standard size—as five hundred dollars, one thousand, five thousand—and this is then sold to any banker who has spare funds. In many cases, it is practically an advance of capital for further extension of the business. In foreign countries the paper held by banks is principally two-name, and the banker buys or discounts it with reasonable assurance that it will be self-liquidating, i. e., that the sale of goods or the consummation of the transactions for which the money has been borrowed will result in providing the means to settle the account when the time comes.

Many persons who have not examined the subject closely are inclined to inquire why the Federal Reserve Act should have limited the operations of federal reserve banks so closely to commercial paper. In some parts of the country farmers, for example, who desire long-term loans in order to enable them to buy or pay for land, suggest that a banking system which is limited to the field covered by the Federal Reserve Act, is not very useful. Elsewhere, the suggestion is from time to time made that the restrictions are so great as to prevent the system from serving a general popular purpose. Criticisms like these ignore the real purpose for which a commercial banking system exists, and particularly the purposes for which a reserve system exists. They overlook the fact that a main function of banking is to enable persons who have debts to pay to get the funds with which to meet them, and that banking is a process of equalizing the supply of fluid funds among those who require them.

The federal reserve system is intended to provide just this means of liquefying and equalizing resources. It is not a method of supplying capital to borrowers for investment. Such investments as it makes are made for

the purpose of affecting the rate of interest in the market, and of enabling banks to meet their own maturing obligations without difficulty. While this service appears to be directly and primarily for the benefit of the commercial world, it is beneficial indirectly to every member of the community. A bank's suspension affects the whole community, and the same is true of the failure of any commercial enterprise. Important as is the function of supplying capital to those who need it for long-term investment, this is the field of finance and not of banking. Preventing suspension of payment and insuring constant covertibility of demand obligations into cash is quite as great a service to the public at large as it is to those bankers, merchants, and traders generally for whom the service is immediately performed.

The Note Broker

Single-name paper will no doubt maintain itself in the United States, and it is worth while to observe how such paper is distributed. Within recent years, "note brokers" have assumed in part the function of taking large quantities of such single-name commercial paper off the hands of the makers and placing the paper with banks which, for any of the reasons sketched, want additional investments of this kind. In such cases, a firm desirous of borrowing say $100,000 may make up twenty notes of $5,000 each or may put the obligation into any other of the forms of commercial paper practicable.

The note broker, who has capital of his own to use as a basis for his business, will then purchase this $100,000 of paper at a specified rate of interest—say 6 per cent. He will then go from bank to bank, usually developing a regular set of customers just as a traveling sales-agent might. He will dispose of the paper to the various banks

which have funds that they desire to invest, charging each bank a small commission. This commission represents payment for the work he has performed in testing the paper and acting as an intermediary between the original borrower and the bank which ultimately takes the paper as an investment. His commission also includes a rate of interest upon such capital of his own as he may keep employed in transacting the business. The bank is saved expense and trouble in investigating the character of the paper it gets, and is ready to pay the commission in lieu thereof.

Doubt has been raised by some as to the safety of investments thus made by banks, but experience has shown that, when carried on under proper conditions, the method thus sketched is an unimpeachable mode of redistributing bank loans and bank paper. James H. Eckels, for several years President of the Commercial National Bank of Chicago, has asserted that out of an enormous total thus bought by his institution only $10,000 failed to be paid promptly and of this a substantial percentage was afterwards recovered. This may be an exceptionally favorable showing, but in the main the distribution of paper as to the methods indicated is a growing, and on the whole satisfactory, plan.

Actual Bank Loans

It is a matter of some interest to note how banks have actually apportioned their funds among various classes of paper and how the actual apportionment varies according to the location of the different banks. The comptrollers of the currency now annually publish figures furnished by the banks which show the character of the paper held by national banks classified as demand paper with one or more individual or firm names, demand paper

collateraled by stocks, bonds, and other securities, time paper with two or more individual or firm names, time paper with single name, and time paper secured by stocks, bonds, etc. The amount and percentage of each class of loans made by the banks on or about June 14, 1912, 1913, and 1914, respectively, were as follows:

Class	June 14, 1912 Amount	Per cent	June 4, 1913 Amount	Per cent	June 30, 1914 Amount	Per cent
On demand, paper with one or more individual or firm names	$571,343,681	9.6	$603,735,269	9.8	$616,911,197	9.6
On demand, secured by stocks, bonds, and other personal securities	985,421,576	16.6	980,989,427	16.0	1,036,976,740	16.1
On time, paper with two or more individual or firm names	1,973,453,245	33.1	2,032,569,547	33.1	2,066,659,475	32.1
On time, single-name paper without other security	1,198,505,689	20.1	1,261,484,534	20.5	1,336,693,365	20.8
On time, secured by stocks, bonds, and other personal securities, or on mortgages or other real estate security	1,225,178,240	20.6	1,264,249,356	20.6	1,372,828,438	21.4
Total	$5,933,904,431	100.0	$6,143,028,133	100.0	$6,430,069,215	100.0

The figures show that there is decided difference between the amounts of the various classes of paper held by banks in different parts of the country and that the amount of the various classes varies considerably from year to year according to the development of business. The following table shows the amount and character of the loans made by national banks in the city of New York:

Loans and discounts	Sept. 1, 1910, 39 banks	June 7, 1911, 40 banks	June 14, 1912, 37 banks	June 4, 1913, 36 banks	June 30, 1914, 33 banks
On demand, paper with one or more individual or firm names	$9,948,094	$9,356,484	$17,796,847	$13,486,717	$12,952,708
On demand, secured by stocks, bonds, and other personal securities*	328,145,065	331,736,688	326,897,301	302,904,035	372,091,296
On time, paper with two or more individual or firm names	176,608,890	177,331,562	171,791,524	178,030,288	192,530,756
On time, single-name paper (one person or firm), without other securities	170,708,003	197,030,419	219,172,889	189,754,147	228,852,438
On time, secured by stocks, bonds, and other personal securities, or on real estate mortgages or other liens on realty*	188,470,806	188,111,280	223,410,194	202,791,617	254,668,605
Total	$873,880,860	$903,566,433	$959,068,755	$886,966,804	$1,061,095,803

* Including notes secured by deposit of commercial paper, chattel mortgages, real estate paper, etc.

Specializing in Loans

From the tables just given it may be inferred that banks often specialize in certain classes of paper. This

is partly due to the different character of the paper presenting itself in different communities, and partly to the fact that banks, like other institutions, become accustomed to certain kinds of transactions, grow expert in carrying on those transactions, and then find it more economical and profitable to confine their business to those lines in which they are most experienced and for which they have the best facilities. This leads to specialization, which is now carried to a very high degree in some cities.

Certain banks will be found which rarely make large loans on call but confine themselves to time paper originating with commercial houses. Others find that they have a clientele consisting largely of stock operators, and they make the bulk of their loans upon collateral security, usually upon call. Other classes of business drift away from them, in a measure at least. A degree of specialization as to the size of loans also exists, some banks practically confining themselves to loans that are not below a certain figure. Other banks operate very largely in loans to merchants engaged in a given kind of trade and become familiar with the peculiar needs of that trade, the periods at which most capital is likely to be wanted by borrowers, and the conditions upon which accommodations and discounts may safely be granted.

In towns where the chief business is manufacturing in certain lines, specialization may be carried to a very high degree, while at the same time the banks may, for the convenience of the community, conduct a general business in discounting local mercantile paper, making loans on securities to individuals, and the like.

The National Bank Act has to some extent limited this kind of specialization by restricting the amount of the loans (in relation to capital) that may be made to

particular individuals or firms—a point that will be dealt with elsewhere.

TEST QUESTIONS

1. By what means does a bank determine the financial responsibility of its borrowers?
2. How do banks dispose of surplus funds?
3. Explain what is meant by rediscounting.
4. What sort of commercial paper is eligible for rediscount under the federal reserve system?
5. What is the limitation placed on the rediscount of bankers' acceptances?
6. How does the rediscount plan of the federal reserve system enable banks to meet seasonal requirements for money in their respective communities?
7. Distinguish between single-name paper and double-name paper. How is this question related to the federal reserve system?
8. What are the functions of a note broker? Just how does he carry on his operations?
9. For what reasons do certain banks specialize in particular kinds of loans? Cite a concrete case.
10. How do the loan conditions vary in different sections of the United States?

CHAPTER V

BANK DEPOSITS

How Deposits Are Made

The ordinary conception of "making a deposit" is that of taking to a bank actual "money" or "currency" and handing it in over the counter to the representative of the bank, who counts it and credits it in a "pass book." This seems to be the clear meaning of the term "deposit" —something deposited or left. As a matter of fact, it must be regarded as a totally erroneous conception of the bank "deposit" when viewed from the general standpoint of credit.

It is true that a bank deposit may be made in exactly the way indicated. A man may have in his possession gold coin, and, not liking the weight of the money, may take it to a bank, hand it in, receive credit, and then pay his debts by means of checks upon the bank. But it is equally clear that other things may be "deposited." Paper currency may be deposited, and this may be either notes issued by the government (which are practically certificates to coin in the vaults of the Treasury), or "notes" issued by the banks themselves. It is also possible to "deposit" with a bank "checks" upon other banks which are simply claims to "deposits" in those other institutions. All these methods of depositing are constantly in vogue.

But it is possible to make a deposit without resorting to any of them. Suppose a would-be borrower, A, who

common form of deposit.

has property or is known to be in a thoroughly solvent condition, goes to a bank and negotiates a loan. That loan may be allowed him, not in the form of actual coin or currency, but simply in the form of an entry in a pass book. In return for this entry, the borrower leaves with the bank his own note secured or unsecured by collateral. In this case, a "deposit" has been created just as actually and just as truly as if A had walked into the bank with a sack of gold coin and had passed it over the counter, receiving credit for it in a pass book just as he did when he left his own note for a similar amount.

Deposits, then, may be made in any one of these several ways. Banks, in reporting the amount of their deposits, do not distinguish at all between the different ways in which such deposits may have been made, but report the figure as a lump sum. Merely to know, therefore, that a bank has "$100,000 of deposits" throws no light at all upon the way in which these deposits were created, though it may safely be assumed that the bulk of them are credit deposits.

Classes of Deposits

There are no figures from which it can be positively stated in which of these ways the greatest quantity of deposits are made or what are the relative amounts of the various classes of deposits. Observation of banking, however, shows conclusively that the deposits made by actually handing in coin or currency over the counter is comparatively small. A very large volume is created by handing in to the banks claims upon other banks in the form of checks or drafts. Another large amount is made by securing credit at banks and leaving a personal or firm note, secured or unsecured, with the institution.

It should be noted, however, that these two methods

are substantially identical. There is no difference in principle whether A is credited with $1,000 at the First National Bank, as a result of his having left there his personal note for $1,000, or whether he is credited at the First National because he has handed in a check for $1,000 drawn upon the Second National by B who got his credit with the Second National by leaving there his own personal note. In the second case (where A leaves a check drawn by B to his credit), the First National simply takes the check, collects it at the Second National, and places the amount to A's credit. There is a difference in detail because in this form of the transaction two banks and two individuals are involved. The legal relationships created are slightly different. But so far as the banking community as a whole in relation to the commercial community as a whole is concerned, there is no difference whatever.

This fact can be apprehended even more clearly by supposing that A and B both deal at the same bank—the First National. B may then get his credit at the First National by leaving a personal note, secured or unsecured, and may then draw a check in favor of A. A deposits the check at the First National, which merely makes a transfer of the credit from B to A. In every respect then, so far as banking principles are concerned, there is no difference between these two types of transaction. The only real difference in the making of deposits is between the transaction where actual coin or currency is left with the bank, and that where the deposit is secured by creating a credit. Such credit deposits unquestionably exceed those made by leaving coin or currency in a very large proportion.

This can be better understood when it is stated that the total individual "deposits" reported by the banks of the

United States in the last annual statement to the Comptroller (1914) were $18,517,700,000, while the total gold and silver money in circulation in the United States on about the same date was only $3,738,300,000, or less than one-fifth of the deposits.

Nature of the Deposit

When the bank grants a deposit by crediting a borrower on its books, or when it receives a deposit in coin or currency, it binds itself to pay cash on demand. That is to say, any holder of a deposit credit in a bank, or any holder of a check given to him by the owner of such a deposit credit, is in position to go to the bank and demand actual money or currency. The bank must pay such demands when presented, or close its doors. In other words, the deposit credit in the solvent bank can be, and is, used as a means of purchasing power which has exactly the same effect in making a demand for commodities as an equal sum in money or currency.

So long as the recipient of the check, or the holder of the deposit credit, believes that the bank is in a position to liquidate any such obligation when presented to it, the claim on the bank is to him the same as money or currency. This means that deposits will not be called for in cash or currency to anything like their total amount. It is entirely conceivable that all the business of a given community should be done with a single bank, and that practically all the business of the town should be transacted by using checks instead of by the actual passage of currency. If such were the case, there would be no reason why the bank should not go on granting credit deposits up to any amount that it considered the property of the community would warrant, relying upon the payments from individual to individual to offset one another,

since (by the terms of our supposition) coin or currency would not be called for at the bank. In such a situation, there would be no reason why the bank should keep any coin or currency on hand.

Relation to Currency

The fact is that the business world does use a considerable amount of coin or currency in actual transactions. There are several reasons for this. Banks are not universally accessible; they are not trusted by everyone; not everyone has a bank deposit account; banks do not care to transfer on their books very small transactions; doubt is felt concerning the solvency of various banks; and other reasons exist which make it imperative for banks to be in a position to supply the actual demands of the community for coin or currency. The result of conditions in the business world is that there is a steady flow of coin and currency into and out of the bank, certain sums being drawn out today and equally large sums being left there by other persons who have received them in the course of their business. The ebb and flow of coin and currency out of and into the bank is like water flowing out of a reservoir which is fed by a number of pipes supplying substantially the same amount that is drawn off.

How large should this reservoir be? In other words, how much must a bank keep on hand in coin or currency in order to make its deposits good and to compel confidence throughout the community that a check presented at the bank will be instantly cashed?

This is a matter that can be determined in any community only by experience, which in turn depends upon the habits of the community itself. The amount needed varies from country to country, from region to region,

and from town to town. There are certain rules derived from experience which are of use in the matter, and most countries have laws which attempt to regulate the practice of banks in this regard, but the actual determination of the amount must be made by the banker himself. It is fundamental to his interest that he judge it correctly, otherwise confidence in his institution will be lost.

Distribution of Deposits

In practice, the business of the community is performed by a great number of banks, and it is the relations between these banks, and between them and the community, that determine the distribution of coin and currency, and ultimately the distribution of the deposits. For example, if ten banks exist in a given community, all with equal capital, it is clear that in the course of business each one will be likely to receive some claims upon the others. Since the amount of credit deposits that each can grant the community depends largely upon the amount of cash it has in its own vaults, it will endeavor to collect these claims from the banks upon which they were drawn, at the earliest possible moment. It is clear that Bank A, which has claims of $1,000 each upon banks B, C, and D, can be prevented from collecting these claims in cash and thereby reducing the cash on hand in those other banks, only if banks B, C, and D have each a claim of $1,000 upon A. In such a case, the obligations will be offset against one another and no coin or currency will be shifted from one to the other.

In practice, no such exact offsetting or compensation takes place. Bank A may have claims aggregating $985 against B, C, and D, while B, C, and D may have claims amounting to $900 against A. In that case, A will be the

net gainer by the day's transactions with the other banks of $85 in cash, while the other banks will lose that amount to it. If B, C, and D kept on losing in this way, the time would come when they would no longer have funds with which to meet claims presented against them. They would foresee such a result because of the steady reduction in their cash on hand and would endeavor to provide against it by selling out their assets. If they were successful in doing this, and if the drain of cash continued, the time would arrive when all their assets would be converted into cash and all this cash transferred to some other bank or banks. Then the process would stop and B, C, and D would go out of business. A condition of this kind rarely exists in actual practice. B, C, and D may lose money to A on the 1st of the month and may gain it back on the 2nd. Or they may steadily gain for the first half, and as steadily lose for the second half, of the month. The shifting about of the reserve money between the banks, however, determines the relative amount of loans that each is able to make, and consequently determines the distribution of the business of the community among the banks. Those banks which enjoy the greatest confidence on the part of the community are the ones which receive the greatest amount of checks and claims on other banks, and which are consequently able to draw on the others to the greatest extent, thus taking to themselves a corresponding proportion of the liquid funds of the community and using them as a basis for further bank loans to "depositors."

Cancellation of Deposits

From what has been said it is clear that just as a deposit is made without the use of money it may also

be destroyed or terminated without the use of money. A borrows $1,000 from the bank, giving his note for the amount and being credited therewith on the books. He pays this sum to B who may himself be in debt to two other banks in sums of $500 each, the indebtedness falling due on the day when he gets A's check. B may use A's check in liquidating these payments. In such a case, $1,000 worth of bank claims against the community has been cancelled by the creation of a new claim amounting to $1,000. There is a rearrangement of the indebtedness among the banks themselves, but that is all.

It is thus seen that the credit transaction out of which the deposit usually grows may be brought to an end and cancelled in precisely the same way as that in which it was created. The effect of the credit deposit during its life has been merely that of facilitating exchanges by rendering goods acceptable in payments at specified ratios to one another, the judgment of the banker intervening and operating as an assurance to the community that the borrower has goods equal to the amount of funds he seems to have within his control.

It is evident, therefore, that a general rise in the amount of deposits at the banks indicates merely that the banks are making large loans all around to the community. A rise in the amount of deposits at a single bank may mean nothing more than a transfer of the business of the community to that bank. A general decrease in the amount of deposits, taking the banks as a whole, means a shortening of accommodations extended to the community, while a decline in the deposits of a single institution may mean nothing more than a loss of popularity on the part of that institution and a transfer of its business to others.

Significance of Deposits

When the bank deposits of a country are seen to be steadily growing, this may be taken as evidence of business activity and consequent or co-ordinate activity in the extension of credit for the purpose of supporting the business of the community. Ordinarily, therefore, large deposits are equivalent to large loans and large loans are obtained when borrowers can use them profitably and when they are able to impress bankers with the opinion that the enterprises in which they wish to engage are sound and are likely to be profitable, or at all events that they have behind them an abundance of actual wealth with which to back up their ventures.

Should a time come, as is occasionally the case, when bankers exhibit a spirit of undue optimism, reflecting a speculative tendency on the part of the community, there will be danger of an over-extension of loans, which is usually indicated by the growing deposits of the bank as an aggregate. This may continue indefinitely, inasmuch as a period of the kind referred to is usually a time when a spirit of over-confidence is abroad and when, therefore, there is little disposition to test the ability of the banks to pay cash. Unduly encouraged by the failure to draw on them, banks in such periods may continue adding to their loans and may thus pass the point where experience would indicate the desirability of restraint. Such a condition is termed "inflation," and is frequently accompanied by high prices throughout the mercantile community due to the use of the bank credit or deposits in purchasing goods, employing labor, and carrying on business operations in general.

A period of contraction is the reverse of this state of affairs, and is usually seen when loans are shortened,

either through fear on the part of bankers or through conservatism on the part of borrowers who see no prospect of employing the loans profitably. In such a case, there is a tendency for the stock of coin and currency in the vaults of the bank to increase far beyond what it would normally be, for the reason that, as the outstanding volume of deposits declines, the individuals who hold the title to them are fewer (or at all events control a smaller amount of the claims against the banks) and hence are not able to draw out the cash as rapidly as otherwise.

"Idle money" tends to make bankers feel more ready to increase their loans at the first favorable opportunity, and thus in the banking community generally there is a backward and forward movement around a point of stability which represents the normal relationship of the business community to the bank in respect to extensions of credit. This normal point may be different in different countries and may vary from one period to another, depending upon a variety of conditions some of which we have already sketched.

Volume of Deposits

It is worth while to note the total amount of deposit credits existing in various classes of banks in the United States. Such a showing is presented in the accompanying table. The amount of deposits carried by a given class of banks may, however, be widely different from that allowed by another class, for banks vary greatly in respect to the relationship between their outstanding deposits and their other classes of liabilities. The class of liability which should be studied in close relationship to the deposit is the bank-note.

Year	Number of banks	Loans*	Resources	Capital	Individual deposits
1907	19,746	$10,763.9†	$19,645.0†	$1,690.8†	$13,099.6†
1908	21,346	10,438.0	19,383.4	1,757.2	12,784.5
1909	22,491	11,373.2	21,095.0	1,800.0	14,035.5
1910	23,095	12,521.8	22,450.3	1,880.0	13,283.4
1911	24,392	13,046.4	23,631.1	1,952.4	15,906.3
1912	25,195	13,953.6	24,986.6	2,010.8	17,024.0
1913	25,993	14,626.7	25,712.2	2,096.8	17,475.7
1914	26,765	15,339.5	26,971.4	2,132.1	18,517.7

* Includes overdrafts.
† In millions of dollars.

Inter-Bank Deposits

Just as an individual may obtain a credit with a bank by making a "deposit" with that bank, so a bank may obtain a credit with another bank by making a deposit with that other bank. Such action may be taken by a bank for any of the reasons which impel an individual to secure a deposit credit with a bank. That is to say, it may have spare or idle funds on hand which it does not want to use immediately and which it deposits in a better-equipped bank merely for safe-keeping. Or it may have funds that it desires to place where they will bring in a small interest, instead of keeping them idle in its own vaults. Or it may feel that a deposit credit with another bank which can be drawn upon will be serviceable or desirable in its own business.

The two last-mentioned reasons for inter-bank deposits are the ones that have controlled, usually, the growth of such deposits. Such deposits are found in those cases where banks are organized separately from one another, and the systematic making of such deposits tends to place the reserve money of the country in a comparatively small number of strong institutions. Where a system of powerful banks with many branches exists, inter-bank deposits of this kind are less necessary and far less numerous.

The National Bank Act recognized the necessity of such inter-bank deposits by authorizing country banks to deposit three-fifths of their reserve funds with banks

in reserve cities, and banks in reserve cities to deposit one-half of their reserve funds with banks in central reserve cities, the last-named class being required to maintain 25 per cent of their deposit liabilities on hand in currency. In this way, the massing of the funds of the country in reserve and central reserve cities was brought about. As there are but three central reserve cities, a very decided degree of centralization was produced.

The national banks thus re-deposited their reserves partly in order to earn an interest upon them, but even if no such interest were paid there would be a very substantial volume of such inter-bank deposits for the reason already mentioned—that a bank may need a deposit with another bank in order to facilitate its business. Banks standing in this relation to one another are called "correspondent" banks, the depository or the depositing bank, indifferently, being referred to as the correspondent of the other. This system is now, of course, in process of modification, it being required under existing law that the federal reserve banks supersede the large individual national banks as holders of the concentrated reserves of the nation.

TEST QUESTIONS

1. Explain the three typical methods by means of which a deposit may be made at a bank.
2. Explain: "The bulk of deposits are credit deposits."
3. Explain why it is that a loan and a deposit may be essentially alike.
4. How does the question of reserves affect the subject of deposits?
5. What does a general rise in the amount of deposits indicate?

6. What does it indicate if it takes place at one particular bank only?

7. Explain how periods of expansion and of contraction influence bank deposits. When do deposits rise, and when do they fall?

8. What are inter-bank deposits? What economic use do they serve?

9. What were the provisions of the National Bank Act concerning inter-bank deposits of national banks?

X

CHAPTER VI

DOMESTIC EXCHANGE

"Exchange" Function

Why does any bank need a deposit with another bank in the course of its business? It may need it simply for the sake of convenience—that is to say, in order that the bank with which it deposits may be able to redeem notes or cash checks drawn upon the bank which makes the deposit. Both of these functions may be performed by the correspondent bank or by a federal reserve bank under the new system.

But, besides these services, the correspondent or reserve bank may perform another service known as that of "exchange." Thus: A in New Orleans may have bought a bill of goods of B in New York. He wishes to pay B but he has no account with a New York bank. He may send B a check on his New Orleans bank in which case B would have to have it collected. But B may exact payment in "New York funds"—that is to say, he may insist (or it may be a part of the original agreement) that he shall be paid in funds that are immediately available in New York. A can make such payment by packing coin and currency to the desired amount and shipping it to B—a means of payment sometimes resorted to. Or A might find another individual, C, who had a claim falling due in New York. He might induce C to make this claim over to him and (supposing it was equal to the debt he owed to B) he could in turn make it over to

B who would then collect it from the man who owed it in New York and whom we may call D. This would obviate the necessity of sending either coin or currency from New Orleans to New York. Debts would be offset against one another and that would be the end of the matter. But evidently such a process of matching or offsetting debts and claims would be very difficult to carry out in the way indicated. It is much simpler to transact such operations through the banking mechanism of the country and thus the banks perform their exchange function.

Mechanism of Exchange

In practice, up to the present time, if A wanted to pay B he would not search for C but would go direct to his bank and ask for a "New York draft" or for "New York exchange" to the amount desired. Then he would hand the bank his own check upon it and the bank would hand him a "draft" on a New York bank for an equal amount. For this service, it would probably charge him a small sum known as "exchange."

Evidently, if a great many people came to the bank and made demands of this kind, the bank would constantly have to replenish its account with its New York correspondent, unless it were willing to see the credit exhausted. But in practice the bank might receive just about as many claims on New York as it drew checks against New York. Thus C might be paid by his New York debtor with a check on a New York bank and might deposit this with the same bank which had issued to A the draft on New York. In that case the bank could send the check deposited by C to its correspondent in New York, who would credit it and collect the amount. Then the bank would have made a profit on the two operations

equal to the amount that it charged A for the draft in the first place (less of course the cost of clerk hire and correspondence). It would also have met the convenience of two customers, and would thereby have helped in extending its business.

If such transactions did not exactly balance, the bank might ultimately have to ship some currency or to buy exchange from someone who had a credit in New York. This would be an additional element of cost, but of course it would be far less than if the currency had to be shipped in every transaction. There are other ways in which the bank might increase its credit with its correspondent in New York. It might discount paper payable in or near New York, and then send such paper to its correspondent bank for collection, the proceeds to be credited to its account. Whatever methods were adopted, the net result would be the settlement or payment of the claims of the community for goods shipped to different parts of the country.

The inflow and outflow of money in any given community must in the long run equal each other. In an agricultural section, for example, when crops are good and prices high the inflow of money will be large and the purchasing power correspondingly great. These increased purchases again result in a larger outflow of money. Perhaps some of the outflow will consist of paid-off loans, thus reducing the net indebtedness of the community. On the other hand, a crop failure results in a small inflow of money. Certain necessities must, nevertheless, be purchased, and in order to pay for them it may be necessary to borrow from outside sources so as to equalize the inflow and outflow. Thus all sales, purchases, traveling expenses, freight charges, wages, insurance premiums and payments, gifts, taxes, and all other

factors of commerce and gift combine to bring about an equilibrium in exchange for each community.

Bankers exercise a very important control over these community operations. It is conceivable that, if the total outflow for a long time continued to exceed the inflow, a town might become completely exhausted financially; in other words, bankrupt. Bankers have no direct control over the purchases of their clients but through their ability to raise the rate of exchange or stop it entirely they can exercise a very potent control over business operations. Exchange charges are an important element in the cost of doing business. By raising the rate of exchange, profits are reduced or sales become impossible and purchases decline in volume and variety or cease altogether. These various operations gradually tend to restore a safe level in the trade balances of such a community with the outside world.

Reasons for High Exchange Charges

The fact that prior to the Federal Reserve Act there was no general system of clearance, has given rise to high exchange charges. As things stand today, a check drawn by one man on another in the same city is collected without charge. If he takes it to a bank and deposits it there, the bank pays the face of it, and then gets it back through a clearing house in which it joins with other banks who offset these obligations against one another. The bank with which the owner of the check deposits it may have received five hundred checks aggregating, say, $10,000; while another in the same city may have five hundred checks drawn on it but aggregating only, say, $9,000. In such an event, the bank had to pay only $1,000 net in order to square itself with other banks of the community, and the cost to it is nothing beyond its

bookkeeping, management, and clerical service involved in the operation of the clearing house.

When, however, collection is undertaken, there is reason to expect development of heavier charges. If the customer presents a check drawn on a bank in a different city, the bank which cashes the check is theoretically obliged to transmit that check by mail either to the bank on which it is drawn, or to another bank in the same city, and then to receive back the amount of the remittance in the form of currency, paying express or postage charges, insurance, etc., and losing interest on the funds during the time they are in transit.

It is true, of course, that where exchanges are going on between two large centers such as New York and Chicago, the competition of the banks secures rates charged for exchange a good deal below this estimated cost based on the elements already indicated. If experience has shown that about as much money is being sent from one community to another as is being received from that other community in the course of six months, competition among the banks brings about an adjustment wherein the claims of different individuals in the two cities are offset against one another, and only the net balance is shipped.

In the long run, the man who wants to send most funds from one of these places to the other, is charged a rate which is indirectly based upon the cost of shipping the net balance of funds. This fluctuates from time to time because the amount of the net indebtedness due from one point to the other also fluctuates. Moreover, in sundry places banks have reached an agreement with one another to fix a rate for such clearance, and thenceforward such a rate is made arbitrary and is not allowed to fluctuate as net balances of indebtedness vary. Competition

between banks has led to the establishment of "par points" throughout the country; that is to say, points whose checks will be collected without charge in order to provide funds for the purpose of managing the collection of other checks drawn on neighboring points.

Checks Treated as Cash

Under the check collection system which has been in vogue in the United States for many years, inter-bank claims—that is, claims of one bank upon another—are the equivalent of checks when the bank which owes the money is solvent. It has therefore been customary under the reserve system of the United States for reserve-holding banks to say to others that they would be glad to credit these others with such checks as they (the latter) might send in to them immediately upon receipt. That is to say, it has been customary for Bank A in New York City to give immediate credit to Bank B in Birmingham, Alabama, for such checks drawn on Bank X in Chicago, Y in Tacoma, and Z in Minneapolis as B might send to A. Thus Bank A in New York City practically undertook to collect checks on X, Y, and Z; and meanwhile it stood ready to pay to Bank B the face value of these checks on demand.

Of course, this meant that Bank A lost the interest on the funds during the time that it was engaged in collecting the checks in question, and was also obliged to carry whatever expense resulted from the collection process, such as clerical hire and postage. These items seem small when figured for any particular check; but when figured for the multitude of bank checks that daily pass over the counters of the banks of the country, they become enormous.

Moreover, it is evident that the practice of making

checks immediately payable at the place where they are deposited, has certain serious implications. It necessarily means that the bank which undertakes to pay them must have a sufficient sum in its vaults to meet any possible demand upon it. The same is true with other banks. This condition of affairs continues so long as there are any checks outstanding which have not reached the bank upon which they are actually drawn. There is in short a so-called "float" which represents the volume of checks afloat in the mails at any time and not liquidated.

Under the existing system, moreover, the checks sent for credit collection are constantly crossing one another. Bank A in New York, for example, has a check on Bank B in Chicago, and mails it to C in Chicago with instructions to collect it of B. It may easily happen that, at the same time, B receives a check on A (in New York) and sends it to D in New York with instructions to collect it of A. If each of those checks is supposed to be for $100, it is clear that during the period of collection Banks A and B have each become liable for the payment of $100 which has not been charged off against the accounts of those who originally drew the checks. There is a fund here of $200 which has to be protected by a reserve sufficient to guard against demands for cash. It is clear that this situation has grown up as a concomitant of the practice whereby deposits of outside banks in certain cities were allowed to count as reserves for them. In fact, with no central means of collection and offset, this was almost inevitable.

TEST QUESTIONS

1. What is meant by the exchange function of banks?
2. Explain: "The inflow and outflow of money in any given community must in the long run equal each other."
3. How may bankers influence the inflow and outflow of money in their own community?
4. What factors determine the rate of exchange?
5. How do banks handle the exchange and collection of checks sent to them from various parts of the country?

CHAPTER VII

FOREIGN EXCHANGE

Exactly the same kind of operation that takes place between two banks located in cities in different parts of the same country, occurs between banks in different countries. In transactions of the latter kind, the operation which we have just described is called "foreign exchange." Its nature is the same as that of the domestic exchange operation, but it is more complex. This complexity is due largely to the fact that different countries usually have different currencies, and that therefore one currency has to be estimated in terms of another. For example, A buys a bill of goods from B in London, and B charges him £100. A, living in New York, wants to pay the £100 but he has only American gold. He might buy British gold and ship it across the ocean, but in practice he would ask his bank to give him a draft on London for £100.

If the bank were willing to perform this service without "exchange" how much would it have to charge A? That would depend upon the gold value of the English pound sterling measured in American dollars. If this value was $4.86, the bank would have to charge A $486. That is to say, it would get $486 in gold or the right to demand from some bank $486 in gold or its equivalent, and it would give A the right to demand £100 in London and he would send this draft to his creditor, who would present it for cashing at the bank on which it was drawn

or would deposit it at his own bank. As a matter of fact, of course, the bank would not perform the service gratuitously. This raises the question how much it can and ought to charge A for the draft. Evidently if A shipped the gold to London, he would have to pay someone who owned English sovereigns at least their gold equivalent in American money. Then he would have to pay transportation charges, marine insurance, etc., and he would have to lose the interest on the gold while it was in transit. Supposing that the sum total of these expenses averaged 3 cents per pound sterling, A could evidently better afford to pay the bank anything up to \$4.89 rather than engage in the exchange business himself.

There would be a good many Englishmen desirous of getting claims on New York in order to pay their debts there and consequently a certain amount of offsetting of debts would take place even if the bank declined to furnish exchange cheaper than the individual could actually send his gold. The result would be the creation of an exchange market which would establish a rate of exchange at which persons having claims on London were willing to sell them in New York and persons having claims on New York were willing to sell them in London. This is exactly what occurs through the banking mechanism of the country, the so-called "rate of exchange" being determined by a comparison of the debts due by and to a given country.

In this exchange market the indebtedness of any given country is estimated not as compared with any other one country but with the commercial world as a whole. It may be that a given country at a certain moment is heavily in debt to another while others are heavily indebted to it and to the second country. In that case it may be

able to offset its debts against one another. Or such a country may be indebted to another country but there may be a moral certainty that the indebtedness will swing the other way before long. In that case the creditor country may be induced to carry along the indebtedness for a few weeks or months, in consideration of a proper interest payment, knowing as it does that the debt thus created will be offset before long. The cost of tiding over a temporary indebtedness in this way of course adds to the cost of exchange. In the long run, however, a country has to send abroad as much as it gets from abroad or else ship the difference in coin or in titles to local wealth, such as stocks and bonds.

Everything that goes to make up the so-called "balance of trade" of a country engaged in business with other countries, influences the amount that is due by or to it and thereby affects the price of exchange temporarily or in the long run. Among a country's exports are not only goods but the services it performs for others, such as ocean freights, and the securities it sends abroad. Among its imports are not only the goods it receives but the services rendered to it, such as the entertainment of its tourists abroad. Americans annually spend large sums in foreign travel and this affects the balance of trade, their satisfaction in travel being properly considered an import while the money they spend is so much coin or credit exported.

Financing Foreign Trade

It has been a subject of complaint for a long time that the foreign trade of the United States was inadequately financed. National banks not being permitted under the old law to establish branches abroad, it was felt that in many cases Americans doing a foreign business could

not get the accommodation to which they were entitled. It was asserted that in those countries where the foreign trade of the United States was still limited in amount and undergoing development, subject to more or less severe competition, the problem of securing adequate funds for the trade was particularly difficult.

This state of affairs was fully recognized throughout the later years of the discussion of banking legislation. In the bill proposed by the National Monetary Commission (the "Aldrich Bill"), provisions were embodied under which a certain number of national banks might combine to establish a bank whose function was to be solely that of financing foreign trade, and which was to be authorized to establish branches in foreign countries as desired. The thought underlying this provision was that, if banks were permitted to join in establishing other banks for the creation of branches, small banks would be enabled to get the advantages of the provision by uniting their efforts with those of others. If, however, the permission to create branches must be confined to a single banking institution, it would be requisite to insist that this institution possess a very substantial capital, which would necessarily mean that only a relatively small number of large banks would be likely to go into foreign fields and establish branch banks of their own. This latter view was undoubtedly sound so far as related to the establishment of a network of branch banks abroad; but it is clear enough that there are many banks in the United States whose capital is ample to enable them to establish a few branches abroad if their business interest is such as to require it.

When the Federal Reserve Act was under consideration, it was at first thought that the plan of joint association of banks for the establishment of branches

would be the more desirable provision, but subsequently this view was abandoned, and in the final Act a provision was made permitting all national banks having a capital and surplus of not less than $1,000,000 to establish foreign branches. It was left to the Federal Reserve Board to determine by regulation about how much capital should be allotted to such branches, and what should be the conditions surrounding their establishment. This provision was ultimately adopted with little change, and now constitutes Section 27 of the Federal Reserve Act. The organization of the Federal Reserve Board made it possible for national banks to make application for the privilege of establishing branches, and to undertake this work actively, but prior to July 1, 1915, only two national banks had applied for and received permission to establish such branches. Of these two, but one undertook the task upon a large scale with an evident view to doing a broad commercial business.

Foreign Trade Acceptances

The Federal Reserve Act, however, approached the question of financing foreign trade not only from the standpoint of the machinery involved, but also from that of practical business methods. It is well known that foreign business generally is transacted upon the basis of standard paper known as "acceptances." The National Bank Act, however, never legalized the use of acceptances, and they have, therefore, been regarded as a prohibited type of paper. The result is that they have not figured to any great extent in American banking practice. There was nothing to prevent State banking laws from providing for the use of acceptances, but such laws have usually been modeled upon the National Bank Act, and have, therefore, been accustomed either to

ignore the acceptance question or to prohibit this form of paper.

We have already considered the acceptance when discussing commercial paper, but at this point it is necessary to examine the special relationship of this form of loan to foreign trade. The Federal Reserve Act provides that any national bank may accept paper growing out of actual commercial transactions involving the importation or exportation of goods, and having not more than six months to run; while it also authorizes federal reserve banks to rediscount such acceptances when indorsed by member banks, or to buy them in open market whether with or without the indorsement of member banks. Emphasis should be placed upon the fact that this type of paper is limited to actual operations involving foreign shipments of goods.

How this provision bears especially upon financing our foreign trade, and what are its important indirect effects upon banking and commercial operations generally may be understood from a brief review of foreign trade methods. In trade between foreign countries, the method of procedure is somewhat as follows: A merchant, A, in Buenos Aires, ships coffee to B in Liverpool. It is agreed that B will accept the draft accompanying the coffee at 90 days' sight. It may be, however, that A when shipping the coffee desires to arrange for a credit that will enable him to liquidate very promptly. He may, therefore, have agreed with B that his draft for the coffee shall be accepted by a Liverpool bank. This bank is induced by B to agree to accept the draft when it is presented. B may protect the bank in some special manner if the institution demands such action, or he may simply have made a satisfactory statement and showing to the bank so that that institution is willing to accept

the draft in consideration of a moderate commission or discount paid it by B for the service. When it has thus accepted the draft, that is, agreed to pay it at maturity, the paper becomes the obligation of a bank of known standing, and is, therefore, very readily salable to some other bank. The discount on it will consequently be very low, and the original drawee of the draft will be able to get his money immediately with very little sacrifice. This means that he can sell very much more closely than would otherwise be possible, because he knows that he will lose very little money in the form of discount or interest.

Older Modes of Financing

With this type of transaction may be contrasted the earlier methods of financing foreign trade in the United States. Suppose that A, in London, has sold woolen goods to B in New York. B may agree to accept the draft of A and may do so; but under the previously existing law, he has been unable to get a bank to accept for him. This meant that a different method of financing was usually provided for. A would borrow from his own bank, giving his own note for the period for which he wished to have accommodation. Then, when the draft was presented, he would pay it off with the funds placed to his credit in his bank; or if, say, a 90-day credit had been extended to him, he would wait until maturity and then satisfy the claims of his creditors out of the funds that he happened to have in hand, or if necessary from the proceeds of the loan obtained from his bank.

Both these methods were expensive. In case he borrowed the money from his bank with which to meet the draft, he had to pay such rates of interest as the bank might exact. Probably very little competition would be

felt—certainly that would be the case in many instances. If he simply waited until the maturity of the draft before making payment, he was of course obliged to pay a higher price for his goods in order to enable the seller to realize sufficiently to carry the loan himself. In other words, the lack of the banker's acceptance has rendered the financing of foreign trade a good deal more costly for American exporters and for the banks on which they depend than for the exporters of any other country.

It was this situation that the provision of the Federal Reserve Act was designed to correct; and of course it was only logical that the paper thus legalized for national banks should likewise be rendered eligible for rediscount at federal reserve banks. The fact that it had been made eligible in that way naturally gave it a much higher degree of liquidity than it would otherwise have had.

Movements of Money

It is evident that there are periodic movements of money between countries, or different cities of one country, so that while there may be a balance against, (say) the United States during the late spring and early summer months, this will be liquidated during the late summer and early autumn, when staple products such as wheat, cotton, and the like, are shipped. During the intervening period, when a heavy balance is owing, the banks will be preparing themselves to meet the obligations, and instead of shipping cash will be carrying the funds in the form of investments in paper.

Then too, when the banks of any country have a surplus of actual cash funds as a result of heavy shipments to them from other countries, they are under the necessity of employing them, pending the time when they will be called for by their owners. In the United States, a

surplus which is carried in this way is likely to be invested in the form of call loans secured by stock or bonds, while in foreign countries it is likely to be invested in bankers' acceptances. We may sum up the situation by saying that in modern trade there is never a time when trade between countries is exactly stable. Balances are due from one to another, and they are represented by the acceptances or obligations of banking houses, due at specified dates, which these houses stand ready to liquidate.

The acceptance market abroad is, in a sense, the balance-wheel of foreign trade, because it represents the factor which is making for stability, and which tends to keep business in a stable, normal condition between different countries. So long as surplus funds are invested in loans on stock, so long must a country necessarily be without the resources it stands in need of to meet any sudden demand or claim upon it for funds to liquidate international balances. So long as the surplus is invested in the acceptances of bankers, just so long is it in position to meet obligations to foreign countries by offering claims upon bankers in those countries, or upon bankers in other countries with which such creditors are engaged in trade. It is an easy and natural way of liquidating and equalizing international balances. For this the Federal Reserve Act makes provision in the way already described.

Loans in International Trade

In current discussions of foreign trade and of the use of the acceptance, it is often assumed that foreign trade can be financed simply as a result of current sales and purchases. From this it might naturally be assumed that if appropriate banking machinery is available to carry the trade, there will be little difficulty in securing a satis-

factory development of the business. This assumption, however, is not in accord with the facts of modern international commerce. International trade is not carried upon a money basis; in many countries payment for large quantities of staple purchases is made in the form of securities based on the enterprises in which the goods thus bought are employed. For example, shipments of steel rails to China for the construction of the railways of that country, have been paid for in bonds which have been taken by banking concerns in the country which sold the rails, and then have been transferred to the investors, who in the last analysis supply the money. Similar methods of financing have been adopted in dealing with Brazil, and with other South American countries where trade grew up on a basis of borrowed capital.

While trade between older nations, as for example France and Germany, is not necessarily founded upon international loans of this kind, they nevertheless figure to a considerable extent. Capitalists in one country are constantly looking for openings in another, and a general interchange of securities has resulted. From this it follows that, as a rule, the country which exports to another is obliged to provide capital for the development of business in that other. In South America, for example, there will be little development of American trade unless the United States is willing to supply the capital for the financing of Brazilian enterprises on a long-time basis. Even in those classes of operations which are not founded on bonds, it is frequently necessary that banks shall stand ready to finance the trade by carrying the merchants who are conducting it during a crop period, instead of expecting to be paid immediately upon arrival of the goods. In other words, banking operations are

not exclusively of a banking nature, but are also financial in the larger sense of the term.

Another aspect of the same situation which deserves notice is seen in the fact that whenever one nation is in the habit of transacting most of its business with another, and particularly when it is in the habit of obtaining its capital from that other, the currency of the creditor nation becomes the standard of exchange on the part of the debtor. In those circumstances bills drawn in payment of goods sold by a third country are usually stated in terms of the currency of the nation which occupies the position of creditor. That is to say, a Brazilian debtor who wished to pay for goods he had bought in New York, is likely to remit a draft drawn on London in pounds sterling. The business of financing the trade between the United States and Brazil is in that way thrown to London, and the banker in London gets his profit from the operation even though it does not concern English goods directly.

Foreign Operations of Reserve Banks

Having thus dealt with the general question of foreign trade and the way in which the Federal Reserve Act provides the necessary mechanism for its conduct, we must say a few words with reference to the foreign operations of the federal reserve banks themselves. The Act grants permission to federal reserve banks to establish agencies abroad wherever they think best. Thus far none has been established, and it is not likely that any will be until after the termination of the European war. Ultimately it will fall to the banks to handle the foreign exchange transactions, and to make payments and collections in foreign countries, while it will be the part of wisdom for the banks to keep a substantial amount of their funds

constantly invested in foreign bills in order that they may place their funds upon a par in controlling the movements of money and rates of exchange between the United States and other countries.

Some Conclusions

The plain conclusion to be drawn from the state of things just described is that although the Federal Reserve Act has provided the mechanism for conducting foreign trade by permitting the organization of branches of national banks, and although it has furnished a means for bringing the banking paper of the United States into harmony with that of other countries through the introduction of the acceptance, there is no reason why international banking should be developed by Americans very much more largely than at present, pending the time when the United States is ready to furnish the capital that is needed by business men and producers in the countries with which trade is being built up.

It should be borne in mind that the growth of the acceptance business in the United States during the past few months since the federal reserve system was inaugurated, has been somewhat exotic, being the result of the desire to finance foreign orders through the intervention of American banking houses. The real test of the power or disposition of American bankers and business men to develop the bankers' acceptance on a permanent basis, will be found when the European war is terminated and a normal condition of affairs has been restored in international relations. The country will then be better than it would have been had not war occurred, for the reason that there will be much larger demand for American capital and American banking machinery than would have been the case under ordinary conditions.

TEST QUESTIONS

1. In what regard does foreign exchange differ from domestic exchange?
2. Explain what is meant by rate of exchange as applied to foreign exchange?
3. What factors determine the rate of exchange in foreign exchange?
4. What items of international trade enter into the balance of trade of a nation?
5. What provisions were made in the Federal Reserve Act to aid American banks in financing foreign trade?
6. What are foreign trade acceptances?
7. Explain in detail just how an exporter would use foreign trade acceptances in financing his operations?
8. What part do international loans play in the development of foreign trade?
9. How is the subject of international loans related to the foreign trade problems of the United States?
10. How are branch banks and foreign agencies used in financing foreign trade?

X

CHAPTER VIII

BANK NOTES

Nature of the Note

Thus far "deposits" have been spoken of as if they were the sole form in which a bank's loans could be granted. This mode of treatment was adopted because the deposit is the chief means of extending credit in the United States today. But it should be borne in mind that it is not the sole means. As seen in another chapter, the note is a co-ordinate means of extending credit. It is, in fact, a means which came into general vogue much earlier than the deposit but has been displaced in certain directions because of the greater convenience of the latter.

There has been a very general failure in popular discussion of banking to recognize the identity of the note and the deposit so far as they relate to the bank itself. There may be a difference of opinion about the comparative effects of notes and deposits upon the level of prices and the general business of the community, but none about their relationship to the bank. If the borrower presents himself at a bank for accommodation, has his security accepted, and his loan granted, there is no theoretical difference so far as the bank is concerned whether it credits him with $1,000 on its books and allows him to draw it out at pleasure or to transfer it to others, or whether it hands him a package of one thousand demand notes which he may present at sight for payment or

which he may hand to one thousand other persons who may present them if they choose. Whether the bank has credited the borrower with $1,000, or has given him one thousand demand notes (or "bank notes"), it is in exactly the same position so far as the outside world is concerned—that is to say it has accepted the borrower's note for $1,000 and in return has given him a sight claim for $1,000 upon itself, the consideration being a rate of interest of specified amount. The bank note must therefore be looked upon from the standpoint of banking just as is the bank deposit—as a sight liability.

Relation of Notes to Currency

The note, when once issued, differs from the deposit in its practical effect upon the bank only in respect to the time it remains in circulation. It is plain that $1,000 in notes paid out by a bank over its counter may be almost immediately placed on deposit with it, in which case all that has happened has been that the bank has exchanged one form of liability for another form. But such an issue of notes may remain in the hands of individuals for a great while. If there is absolute confidence on the part of such individuals that the bank is solvent and able to pay its obligations, and if there is a shortage of currency in the community so that the bank notes fill a convenient place, the life of the notes may be very long.

In the case of the deposit, the existence of the credit upon which that deposit is based may be equally long. Thus, if a single bank does the business of a given community and grants a credit of $1,000 to a borrower, who secures a renewal of his credit from time to time, it is possible that this credit may be indefinitely continued while the claim on the bank may be passed from hand to hand in the form of checks. As a matter of fact, a check

does not pass many times before it is presented for redemption, while the practice of commercial banks is not to grant too frequent or too long renewals of credits. This means that any given draft upon a deposit is not likely to remain long in existence, while the credit which brought it into existence is itself likely to be terminated at a comparatively early day.

The same thing is true of the loan on the strength of which bank notes are issued, but the bank note itself may pass from hand to hand a great many more times than would a check for an equal amount. In other words, the circulation activity of the bank note is likely to be very much greater than that of the deposit of equal face value. This means that the bank note has a somewhat different status as currency from that which is occupied by the deposit. How far the currency activity of the note affects prices in a way different from the influence exerted by the deposit need not be discussed at this point, it being a problem of money rather than of banking. The fact remains that the bank note performs a "currency function" which has generally been considered more important than that of the deposit. If a given volume of bank notes is, on the average, maintained in circulation in any given country, such volume evidently displaces an equal amount of some other form or forms of currency or coin. This may be a very desirable feature of the bank note system, inasmuch as it substitutes a credit instrument of comparatively low cost for a high-cost circulating medium such as gold.

Protecting Notes

Because of this "currency function," it has been felt by legislators in most countries that the issue of bank notes ought to be controlled with very great care, and as

a result numerous methods for restricting note issues have been attempted. It has been asserted that the use of such methods was necessary in order to prevent banks from "over-issuing" their notes, thus driving out the metallic circulation of the country and reducing the circulation to a paper basis. It has been argued further that inasmuch as the bank notes were likely to get into the hands of persons who had no knowledge of the condition of the bank which issued them, such persons were entitled to greater safeguards. Those who received checks, it has been stated, almost immediately had them redeemed in one form or another, while those who received notes might keep them a long time under the impression that they were as good as any form of money. For these and other reasons the idea of a special protection for bank notes has been very generally accepted.

Whether this idea is well or ill founded need not be discussed here; the fact of chief interest is that most of the banking systems of the world provide such protection. This protection may take, and does in practice take, several different forms. One of the most familiar forms is the limiting of the total amount of bank notes to be issued by a given institution. Such a limitation may be based on a lump sum, as seen for instance in legislation that a given bank shall not issue more than a specified amount of notes. More commonly it is based upon capital and may take the form of a provision that no bank shall issue more notes than are equal in face value to the amount of its paid-up capital.

A second mode of protecting the note-holder is that of setting aside a special security for the protection of notes. Thus banks may be directed to invest in a given kind of bonds a sum equal to the amount of the notes they issue. This type of control is seen in the national banking sys-

tem. Coupled with this (as seen in the national banking system) may be a provision that the notes shall be a first lien upon the assets of the bank which issues them.

A third method of protecting a note issue may be the flat guarantee of the government which has chartered the issuing bank that in the event of the failure of such bank it will assume a responsibility for its notes.

A fourth mode of protection may be found in regulations designed to control the classes of security which shall be held by banks behind their notes. Thus banks may be directed not to issue more notes than are protected by given classes of commercial security. This has the effect of limiting note issues beyond a certain point to those classes of loans in which the specified kind of security can be obtained.

A fifth mode of protection is seen in the establishment of peculiar facilities for redemption of notes and for assuring their prompt return to the bank which put them out.

Why Notes Are Issued

The issue of bank notes is taken as so much a matter of course that the reason for their issue is not usually considered in much detail. In fundamental analysis, of course, the notes come out for exactly the same reasons which govern the creation of deposits—someone secures a loan from the bank, and the credit corresponding thereto is granted in the form of a note issue. But this does not explain the selection of the note as compared with the deposit. There must be some reason determining whether a note will be handed to a borrower or whether a credit of like amount will be written in a pass book.

This is usually a question of business convenience

merely, and as such is to be settled by the borrower (always supposing that the bank is able to issue the note if it chooses, under the existing law). The borrower may prefer notes because of their greater acceptability to the person to whom they are to be paid. Thus, laborers usually choose to be paid in notes or coin rather than in checks because they have difficulty in getting the checks cashed. In the same way, an agricultural community usually prefers to take its loans in the form of notes, because the points at which the notes are to be paid out are distant from the bank, so that checks would not be very acceptable. In practice, banks which make loans chiefly in city communities have little demand for note issues, while banks in rural communities can make a much larger use of the notes and, granting that their issue is not made unduly expensive, will prefer them to the credit deposit.

The bank itself naturally prefers to see its obligations remain outstanding as long as possible before being presented. Evidently the longer a bank can keep its notes out before presentation, the longer does it enjoy the interest upon the loan which gave rise to these notes, without having to make any of them good through redemption. If the bank affords all proper facilities for redemption and stands ready to make the notes good whenever they come in, depending purely upon the habits of the community and its confidence in the institution to keep the notes outstanding for a time, the desire to maintain them "alive" as long as practicable is perfectly legitimate. The condition is different when the bank resorts to improper methods for the purpose of avoiding redemption. But, granting that the redemption facilities are adequate, the bank will naturally and properly desire to keep its notes out and will pay them to such

borrowers as are willing to accept them, if it believes that by adopting this form of accommodation it can secure a slightly longer life for its credit.

Note Inflation

It is on this ground that the fears of note inflation have been founded. The supposition has been that banks by constantly making their loans in the note form could keep outstanding a large volume of such currency, and might thereby injuriously affect the composition of the circulating medium. This theory, of course, has neglected entirely the fact that if banks were required to make redemption easy, and if every proper inducement to prompt redemption were accorded, there could be no ground for expecting a note to remain in existence longer than a deposit. In other words, the whole question of inflation, whether effected through the excessive issue of notes or by the excessive creation of deposits, is primarily a question of the judgment exercised in making bank loans in the first place.

In the second place, it is dependent upon the action of the community itself in demanding redemption. If the bank stood ready to grant loans upon inadequate security to start with, and if, when such loans had been granted, the community were willing to take and keep the notes in its possession indefinitely, there might be a note inflation just as in the case of excessive loans which took the form of deposit credits. Granting that the banks exercised reasonable prudence in making the loans originally, the question of note inflation would depend upon whether or not there was any inducement to redeem the currency.

This raises the question what it is that actually produces redemption whether of notes or deposits. In study-

ing the deposit question, we have seen that far the larger part of the demands for coin or currency that are presented to the average institution come from other banks and not from the public. The same thing is precisely true of bank notes. Only a given volume of transactions is likely to be performed by the agency of bank notes in a modern commercial community. This means that bank notes which are issued in excess of that sum will be deposited by the holders with their own institution, since few persons in these days are given to the practice of hoarding, and thus the responsibility for ultimately presenting the notes for redemption at the bank which issued them will be transferred to the institution with which they are deposited. If such institutions find it to their interest or profit to force redemption of the notes, they will do so. If, on the other hand, there is no reason why they should compel the redemption of notes, they will be likely to retain them and pay them out over their own counters.

The whole question depends upon whether or not it is profitable for a bank to issue notes itself. If such is the case it will not pay out the notes of other banks, but will present them for prompt redemption, and when conditions permit or demand the paying out of notes each will pay out its own notes. Under such circumstances, no bank would pay out the notes of another bank, any more than it would grant a customer a credit on another bank instead of on itself.

Theory of Note Issue

From what has been said it is clear that the theory of note issues and their relation to the bank is identical with that of deposits and their relation to the bank. There is in fact no distinction to be drawn in this respect between

the note and the deposit. The putting out of an issue of notes will be considered by the bank under exactly the same terms and conditions as those which have controlled it in regard to the creation or grant of a line of deposits. The classes of security accepted by the bank when it is asked to make an issue of notes are the same as those which it will accept when granting a loan in the form of a credit on its books. The protection of the bank against loss depends entirely upon the security which it receives, and the standing of the borrower who gets the loan. There is no special profit in the issue of notes that does not inhere in the creation of deposits.

The choice between the note and the deposit, as has already been shown, is purely one of convenience. In studying note issues therefore, attention need not be given to any special questions of bank loans or security. The problem of notes relates entirely to methods of controlling the issue, securing prompt redemption, guaranteeing ultimate soundness, and providing for universal acceptability.

Redemption of Notes

Probably the redemption of notes is the most important of all subjects connected with their use. It is obvious that notes, like deposits, should be instantly redeemed in standard money whenever the request is made of the bank which issues them. But, owing to the wide field of circulation which notes occupy, it has usually been felt that a good deal more than this should be attempted. In the national banking system, redemption is carried on at Washington by the Treasury Department, which uses for this purpose a fund equal to 5 per cent of the notes issued by each bank and contributed by each. This fund is deposited with the Treasury at the time when the notes

are taken out. Then if a bank which holds the notes of other banks desires to secure redemption, it may send the notes to Washington and have them redeemed by the Treasury, which pays for them out of the 5 per cent fund and then requires the original issuer to restore this fund to its normal amount and take the notes that have been thus redeemed. The bank which issued the notes is then in position to reissue the notes if it desires.

The system works sufficiently well under the conditions to which the national banking system is subject, especially as every national bank is required to receive the note of any other national bank on deposit. This means that since the national banking system is very widely diffused, having now over 7,000 members, and since other banking systems are so closely allied to it, the holder of a national bank note is practically assured of a place near at hand to which he can resort with his bank notes, deposit them, thus securing the claim upon his local bank instead of the note issued by a distant bank, and thereby provide himself with funds at his pleasure. Where notes are issued by central banks with branches it is usual to have the notes redeemed, under certain restrictions, at those branches.

Whatever the system of redemption employed may be, its uniform object is to guarantee to the note-holder the power to secure liquidation of his claim against the note-issuing bank promptly and without expense. Wherever such conditions are assured, a uniform and stable note currency is the result. Such a note currency may be sluggish in redemption as in the case of national bank notes, or rapid and elastic as in the case of the Scotch bank-note issues. In either case the soundness and security of the currency is assured and its place as an element

in the circulating medium on a parity with other forms of currency is understood.

Ultimate Security of Note Issues

The question whether note issues should be given any ultimate security different from that possessed by the other liabilities of the bank has been considerably discussed and opinions vary widely with reference to it. Probably the best opinion of the day is that no such special security is desirable, but that the safety of the note-holder is to be provided for by means of prompt and active redemption and by confining the issue of notes to banks whose capitals are large enough and whose methods are sound enough to assure the note-holder and the government that there will be a high degree of responsibility on the part of the institution.

This idea is carried a step further when provision is made (as in the Canadian banking system) for making the banks jointly liable for the notes of all insolvent banks. In the case of the Canadian banks, the result is accomplished by compelling banks which desire to issue notes to put up a jointly contributed fund called a "guaranty fund" on which the notes of any insolvent bank may, under certain circumstances, be made to draw. The result of such a provision is to make banks exercise an oversight over one another's issues and to create a probably higher degree of watchfulness than would exist were the banks severally, but not jointly, liable for the outstanding notes.

Such a system, however, is entirely different from one in which a bank is compelled, before issuing any notes, to lay aside a part of its assets in a segregated fund for the purpose of protecting the note issue based thereon. This is the system employed under the National Bank

Act of the present day and has proved to be unsatisfactory. Every national bank upon being organized was originally required to buy an amount of bonds dependent upon the amount of its capitalization and to deposit these bonds in trust with the Treasurer of the United States. Upon so doing, the bank is permitted to receive bank notes to an equal amount and can then dispose of these as it pleases, using them in loans to borrowers. Should the bank fail, the notes can be provided for by selling the bonds and thus establishing a fund for their cancellation. The Federal Reserve Act repealed the provision requiring such purchases of bonds by banks.

Inasmuch as United States bonds have always been of high standing in the market since the system of note issue referred to was first established, there has never been a time when anyone felt the slightest question about the ultimate goodness of the national bank note. This very secure character has, however, been obtained at considerable cost, since the use of the United States bonds has rendered it very difficult to get the notes into circulation when they were wanted and conversely has made it hard to retire them when they were not wanted.

Difficulties of Bond Security

The difficulties which have grown out of the bond-security system under the National Bank Act are of several kinds. It is plain that, if banks are required to buy United States bonds before they can issue any notes, the total amount of the notes cannot exceed the total amount of the bonds. This was not a matter of importance so long as the bonds in existence were larger in volume than the notes that were wanted or were likely to be wanted, but as the national banking system expanded, and as the uses of United States bonds in other directions became

more numerous, the margin of bonds that could be obtained at any given time for the purpose of issuing notes thereon was greatly narrowed. That meant that if at any time there was a sudden call for notes, they could not be issued, since the bonds could not easily be had.

Furthermore, the formalities attending the deposit of bonds with the Treasury and the printing and transmission of notes by the latter institution, have been such as to require many days. About three weeks is the time needed by the Treasury and the Bureau of Engraving and Printing to get out an order of notes for a bank. Few banks can foresee their currency necessities several weeks in advance, and therefore it has often happened that when banks ordered notes, the notes were sent to them after their utility had entirely disappeared, so that in many cases they were sent back to the Treasury without even opening the packages in which they were contained.

Beside these considerations, it is true that the variations in the price of bonds and the rate of interest on bonds now have a more controlling influence in dictating the issue of currency than have the necessities of the community. A banker does not wish to issue notes, unless such issue is absolutely indispensable, except where he can earn a fair rate of interest thereon. Government bonds bear an extremely low rate of interest and in some cases they command a high premium. If a banker who invests, say, $110 in a government bond of the par value of $100 can get only $100 in notes, and if the bond in question bears a rate of only 3% or 4% interest, the investment may not be at all satisfactory when compared with that which the banker would make by using his $100 as a reserve and granting deposit credits.

Of late years, the banks have been enabled to get

United States 2% bonds which sell at about par, so that an investment of $100 in a 2% bond will bring the bank about $100 in bank notes, the margin due to the premium (on which no notes could be obtained) being thus eliminated. Although the rate of interest on the two's was so low, there has been a small profit in issuing notes on these bonds, and the result has been a steady increase in bank circulation, the result of which has been to "tie up" still more of the government bonds behind the notes. Conversely there has been no inducement to cut down the amount of notes in circulation when the currency needs of the community fell off, and therefore the circulation has remained more or less inflexible, gold being exported when there was more circulating medium than was necessary. In other words, the bank circulation has been "inelastic."

Federal Reserve Notes

When the Federal Reserve Act was in process of drafting all these considerations were taken under advisement, and it was sought both to provide for the proper treatment of existing note currency as well as for the issue of new notes. The Act provided for two new classes of currency: (1) federal reserve notes, and (2) federal reserve bank notes. The former were to be protected by commercial paper of the kind rendered eligible for rediscount under the terms of the law, the latter by national 2% bonds purchased from the member banks of the system.

The ultimate form of the Federal Reserve Act, however, provided for the conversion of 2% bonds into 3% bonds by federal reserve banks, such 3% bonds, however, to lose their privilege of deposit to protect circulation; so that under the terms of the Federal

Reserve Act, the natural development will be the conversion in twenty years of most of the national bank notes into federal reserve notes with some accompanying exemptions of these notes through the conversion of the 2% bonds protecting them into 3% bonds; while in the meantime, federal reserve notes, based on commercial paper, will be issued from time to time as demanded, in quantities sufficient to supply the elastic element in currency, and to fill up such gaps in existing national bank notes as might be caused through the retirement of note issues due to the conversion of 2% into 3% bonds not bearing the circulation privilege.

Issue of Federal Reserve Notes

Let us now observe with some care exactly what gives rise to a demand for currency and to consequent issues of federal reserve notes. When A trades with B to the extent of $100,000 worth of goods, he thereby creates a demand for some means of transferring the value of $100,000. This exchange may be made by the actual use of money, or by the drawing of a check. Where the buyer of the goods does not have the means to pay for them, he usually applies to his bank for accommodation, and such bank may meet his requirements by giving him a credit on its books technically known as a "deposit," or by issuing to him its own note or the equivalent thereof. There is no reason why the bank which is thus applied to, if it desires to grant the credit at all, should not give the accommodation in either form that may be desired by the customer.

The customer is likely to be governed entirely by the demand of the people with whom he is dealing, as to the form of payment required. In the case of the bill of goods for $100,000 already spoken of, it is probable that

a check on the bank will be exactly what he wants, in which case no question of note issue is raised. But it may also be that the funds are not wanted for a single payment of this kind, but that accommodation is sought for some purpose which necessitates a number of small payments to persons who do not or can not employ bank checks. In this instance, notes will be needed. Or it may happen that a bank discounts some paper for the purpose of getting notes with which to supply actual calls for currency made by its customers who are not necessarily borrowers, but who want notes to carry in their pockets for the purpose of meeting demands from day to day.

What the Federal Reserve Act does is to permit a bank to take the promises of individuals to pay at the end of a designated period, indorse these promises with its own signature, and, by the deposit of them with the federal reserve bank, obtain in exchange federal reserve notes issued to that bank by a government officer known as a federal reserve agent. The fact that these notes are technically obligations of the government confuses the situation to some extent, because it makes the transaction appear as if it were one which involved the government in some way. As a matter of fact, it is the member bank's demand which gives the signal for the issue of the notes, and determines how many of them shall come out; while it is the demand of the customer of the member bank which influences the action of that bank in applying for them. Ultimately and in broadest terms, then, the provision of the Federal Reserve Act simply allows individuals to make their own obligations, based on commercial, industrial, or agricultural transactions, and then, by putting these through a local bank, to get note currency corresponding thereto. As long as their credit is good they can get the notes, provided the federal

reserve bank is in a position to protect the notes amply with gold.

Under the terms of the Federal Reserve Act, this protection must amount to at least 40 per cent of the face of the note issue; and of this 40 per cent, 5 per cent is deposited with the Treasury Department for current redemption, the other 35 per cent being held in the vaults of the federal reserve bank which issues the notes. The currency is thus elastic, inasmuch as it can be increased to the extent of two and one-half times the supply of gold available—100 per cent being two and one-half times 40 per cent—while it is safe, inasmuch as the protection is adequate to all ordinary requirements. Nothing limits the amount of notes that can be issued, therefore, except the needs of the business community, and the adjustment of the country's gold supply to that of other nations.

Federal Reserve Bank Notes

The federal reserve bank note differs from the federal reserve note in that it is based upon government bonds which are deposited with the Treasury Department to safeguard it, just as is the case with national bank notes. The federal reserve bank, under the provisions of the Federal Reserve Act, is permitted to buy government bonds as a form of investment if it chooses to do so. In addition to this, government bonds may be assigned by the Federal Reserve Board to the federal reserve banks in the aggregate to an amount not to exceed $25,000,000 per annum, which the latter may be required to purchase and pay for at par. Such assignment takes place only in the event that member banks desiring to sell their bonds file application with the Treasury Department for the disposal of their bonds and the retirement of circulation based thereon. If the aggregate of such applica-

Indefinite & vague

tions is more than $25,000,000 per annum, the Federal Reserve Board apportions the purchases among the banks by a method prescribed in the law, which amounts to a distribution according to capital and surplus.

Inasmuch as the banks which thus seek to retire these bonds are, of course, unable to get back the notes that were issued on these bonds (the latter being in circulation throughout the country), this provision of the law amounts to permitting the member banks to transfer to the federal reserve banks, up to the amount of $25,000,000 a year, such government bonds as they may have in their possession, the federal reserve banks assuming thereby the obligation for all outstanding national bank notes previously issued against them. Of course the transaction would not occur in precisely this way, as the federal reserve bank would pay for the bonds, and the money would go into the Treasury, there to be held against the outstanding bank notes which had been issued on the strength of these bonds. The federal reserve bank would then be able to issue its own notes against the bonds so taken over, if it saw fit, as it doubtless would; but the result would be the same—the transfer of the ownership of the bonds to the federal reserve bank, and the assumption by the federal reserve bank of the liability for the notes.

It is easy to see that if this process went on for about thirty years at the rate of $25,000,000 per annum, all the national bonds would have been taken over by the federal reserve banks, the national bank notes based thereon retired, and an equal amount of federal reserve bank notes issued in their place. We should then have this underlying sub-structure of federal reserve bank notes (or, in the interim, of federal reserve bank notes and national bank notes combined); while above would be the

super-structure of federal reserve notes based on rediscounted commercial paper, and varying in amount according to the needs of the country.

How great are such needs? They are, of course, only temporary and exceptional needs, for the regular, steady, permanent demands are met by the underlying structure of bond-secured notes. These varying demands are in part the result of so-called "seasonal" calls for the moving of crops and the like, and in part the result (at special times) of so-called "panic" demands. There is no positive information as to the actual amount of the seasonal demands for crop moving. They vary greatly; and as long as there is in existence a large underlying body of notes, there will always be more or less shipment of currency from one part of the country to another to meet seasonal calls.

The extent of the panic demands can be estimated on the basis of the experience during the autumn of 1914. At that time calls were made on the Treasury Department under the section of the Reserve Act, which extends the operation of the so-called Aldrich-Vreeland Law through local "currency associations" for sums aggregating about $380,000,000. This was the result of an extremely severe currency demand and under no ordinary conditions would again be witnessed. If we estimate the ordinary normal seasonal demands at one-third of this amount, it would probably be an amply high figure. It may be stated then, that when the reserve system is in full operation, there may be a call for from $125,000,000 to $375,000,000 of federal reserve notes, the amount varying according to conditions. At the present time, there are outstanding about $190,000,000 of federal reserve notes, while of this amount little more than 10 per cent is protected by deposits of gold or lawful money, dollar for

dollar. There can be no doubt that the quantity of legitimate commercial paper in current existence is ample to sustain even the maximum demand for currency thus indicated, so that it may truly be said that the federal reserve system is fully able to supply an elastic currency issued to any reasonable amount that may be called for. The only limitation upon the currency is the demand of the community, and the existence of actual live transactions calling for it.

Note Elasticity

It is precisely the quality of elasticity that is most important from the currency standpoint; and it is precisely the absence of this quality that has made it evident that the national bank-note circulation was unsatisfactory. A truly elastic circulation is one which will come into existence whenever there is a sudden demand for additional circulating medium, and will as promptly go out of existence when such demand has passed. Thus, if there is a season of the year at which an increase in circulating medium is needed in excess of what is wanted at other seasons, an elastic currency renders it possible to get this circulating medium without the importation of actual money from abroad.

There are such times in the United States, and particularly in the autumn, when the so-called "crop-moving season" occurs, there is usually a rather sharp demand for more circulating medium to be used in paying farmers' bills. If the banks can issue such circulation freely they can supply the need. In the same way, when the demand for the increased circulation has passed by, the notes will come back to the banks, be redeemed, and go out of circulation. Such is the case in Canada. But in the United States the issue of bank notes under the

old bond-security system has been very sluggish and their retirement slow. The small profit earned by the banker upon his note issues has not been sufficient to make him very active in retiring the notes of others by presenting them for redemption, so that a condition of almost complete "inelasticity" has been characteristic of our national bank circulation.

It should be observed also that the cost of getting out our national bank notes, due to the necessity of buying bonds and obtaining notes through the Treasury Department, made it necessary for the banker to charge a higher rate of interest on his loans than if he had been able to get the notes out with less expensive precautions. The consequence that in those parts of the country where commercial conditions called for the use of notes, the cost of bank loans has been abnormally high and the amount that has had to be paid by the borrower has raised his general expenses of production in a corresponding degree. If, as a result of the difficulties surrounding the issue of notes, the borrower is obliged to pay an extra rate of interest at the crop-moving time or on some similar occasion, the effect is to hamper him in a corresponding degree. This operates to lower his profits for the season, or else to compel him to raise his prices if he can.

It is not a benefit to the banker because it necessarily restricts the amount of business he would otherwise be able to do, since bank loans, like most other classes of purchasable goods or services, attain a wider use as their cost becomes lower. The high cost and inelasticity of the currency thus inevitably raises cost of production. Conversely, in countries where bank credit is rendered as cheap as possible and the security of the note-holder is attained by careful inspection of bank loans and bank

securities, usually carried on by the government for the purpose of seeing that no irregular transactions have been undertaken, one element in industrial cost is reduced and the competitive position of the persons who are obliged to borrow at the banks, as most business men nowadays are, is correspondingly improved. The elastic currency provisions of the Federal Reserve Act should greatly improve the conditions just described.

TEST QUESTIONS

1. Explain: "The note is a means of extending credit."
2. Why is a bank note a "sight liability"?
3. How do bank notes differ from checks?
4. What is meant by the currency function of bank notes?
5. Explain five methods used for protecting bank notes.
6. How does a bank determine whether or not it can profitably issue notes?
7. Explain some systems used for securing the redemption of bank notes.
8. What are the tests of a good redemption plan?
9. Explain the nature of the federal reserve notes. Upon what security are they based?
10. How do federal reserve bank notes differ from federal reserve notes?
11. What is meant by "note elasticity"?
12. What devices are used to secure this elasticity?

CHAPTER IX

CLEARING HOUSES

Growth of Association in Banking

We have assumed thus far that banking went on pretty much in a competitive way and with little association of effort or unity of purpose on the part of the banks themselves. We have assumed that the banks were simply competitive in their efforts, searching for business at one another's expense, or at all events without regard to one another's welfare, just as is the case with firms in any line of business. To a large extent this assumption, of course, holds true of banking just as it does of other classes of business, but there is a large and growing sense in which the statement is not true.

In banking more than any other line of business, probably, it has come to be recognized that the welfare of one institution is dependent upon the welfare of all in a very large degree and that, where one or several banks go to destruction in a community, the danger is that all the others will do likewise, or at all events that they will be seriously crippled as a result of the bad conditions created by the failure of the weak institutions. As a result of the recognition of this fact, there is now a distinct effort in all countries of the world, on the part of bankers of intelligence and leading, to bring about a generally sound state of affairs in their profession, to eliminate all those elements which make for weakness, and in case such elements develop, to endeavor to improve

conditions gradually and systematically rather than to allow the public to become alarmed. This effort is not only in the interest of sounder and better banking and of higher professional standards, but it is also in the interest of the public, which is thereby safeguarded and is taught to look to the banks of the community as a group to protect it against loss or danger.

There are several ways worthy of note, in which this effort to secure what may be called association or co-operation in banking is being carried out. In one way, the effort is seen through the organization of clearing houses which not only work towards the ends indicated but also are labor-saving institutions, as will presently be indicated. The same tendency is seen in the organization of bankers' associations having educational and protective functions and working for legislation presumably of a more appropriate type than that on the statute books. There are other lines along which the same effort is being prosecuted. But of all these methods the one which has attained the most significance is the clearing house.

Nature of Clearing Houses

In the United States today there are 163 regularly organized clearing houses. These have sprung up practically since 1854 when the New York clearing house was organized. Today important clearing houses are found in New York, Boston, Philadelphia, Chicago, St. Louis, San Francisco, Pittsburgh, and many other important cities. They are also found in smaller towns where conditions have been such as to demonstrate the need for them. In Europe, the lead of the United States has been followed by the establishment of the French "Chambres de Compensation," and the German "Clearing Houses" this word having been borrowed from our own nomenclature.

This rapid spread of the use of the clearing house has been due to a recognition of its importance and a desire by means of it to attain the important economies which experience has shown can be derived from it along a number of different lines. The clearing house has proved not only an economizer of cash and labor but also a most important agency, as already pointed out, in promoting co-operation in banking and an effective means for relieving panic and lack of confidence.

The clearing house itself is nothing more than an unincorporated association of banks and bankers. It has a constitution and by-laws of its own designed to control membership and the type of operation in which the clearing house shall engage, as well as to apportion the expense among the various members. In some places the local clearing house has an elaborate building and equipment of its own, while in others its work is carried on in simpler quarters rented for the purpose. But no matter how complex or wealthy a clearing house may be, the essential idea of the clearing process is the same.

The Clearing Process

The clearing process can be best understood by thinking of it as in one sense a bank for banks. From this point of view, the different banks which are members of the clearing house sustain to one another very much the same relationship that individuals sustain to a bank at which they all deposit. How this is can be understood from a simple illustration. Suppose that ten persons, A, B, C, D, etc., are all in the habit of doing business with a given bank. Let us suppose that they all get their loans from this bank, make their deposits with the bank, and do business with one another and with no other person. Then the individuals will deposit with the

bank only money and currency and checks drawn upon it by others. All that the bank will have to do in order to pay the checks will be to make certain records in its books. That is to say, if A comes in with a batch of checks drawn in his favor by B, C, D, etc., while B comes in with a batch drawn in his favor by C, D, E, etc., the checks will be paid by making transfers on the books of the bank from the accounts of B, C, D, etc., in favor of A, and from the accounts of C, D, E, etc., in favor of B, and so on through the list.

Now, it would be entirely possible that in the course of a month, say, each of these depositors should have drawn exactly the same amount in favor of the others. If that were true every man would have paid what he owed to the others and would have received what was owed him by the others without a single cent's having been used in liquidation. This would be an example of a perfect clearing transaction, the clearing process being the offsetting of checks and credit devices against one another in such a way as to obviate the use of cash as far as possible.

Exactly the same thing is done by a clearing house for the banks which compose it. All individuals do not do their business with the same bank, nor do they do business exclusively with one another in trade and commerce. Consequently every bank receives a large number of checks and drafts which it wants to collect of other banks. It might send a bank messenger with a bundle of checks and drafts to each of the banks on which it had a claim and let this messenger bring back the coin or currency in a bag. Then the other banks might send to it in the same way. The result would be that while a messenger with $50,000 was coming to the bank, another messenger with $50,000 might be leaving the bank. Money would thus

be in transit all the time and the risk of robbery would be much greater.

Suppose that, instead of doing the business in this simple and elementary way, each of the banks sends a messenger at a certain hour every day to a designated spot, the messenger taking with him all the checks and drafts held by the bank against other banks. Upon reaching the spot in question, the messengers trade packages. Then the place becomes a clearing house and the process of swapping the checks and drafts is the clearing process. While it is true theoretically, that this process might work out evenly, so that every bank would exchange exactly the same amount of checks and drafts that were offered against it, this is seldom or never the case for obvious reasons. One bank may be gaining in business at the expense of the others or it may be temporarily financing some large transactions. There is thus usually a small balance to be paid—sometimes larger and sometimes smaller but in the aggregate small, when measured as a percentage of the total transactions that are carried out in the clearing house.

Clearing-House Cash

It is plain that while the amount of cash actually transferred may be very small as a percentage of the gross amount of transactions, it may be very large in the aggregate, as a sum of money. Thus, if a clearing house does a business of $1,000,000,000 annually and if 5 per cent of all the payments have to be made in cash, this would mean the transfer of $50,000,000 in cash each year. If the clearing house has suitable vaults so that every bank can keep a certain amount of its coin on deposit there, it can transfer the title to this coin to other banks by giving them paper titles thereto, these titles being then

analogous to the ordinary check drawn by the individual on a bank. Such paper titles are called "clearing-house certificates." Where these are used, if a bank presents say $100,000 in checks and drafts against other banks and has $105,000 presented against it, it has liquidated in the exchange process all except $5,000. Now it can liquidate that by handing out clearing-house certificates to that amount and thereby decreasing its balance with the clearing house in a similar degree. Of course the same result would be attained if the clearing house kept its funds on deposit with some one bank and the transfer were made by giving checks on that bank.

Now if, in the course of a year, a bank maintains about a stable volume of business so that it receives practically as much as it pays out, it is entirely conceivable that it will get the same amount in clearing-house certificates that it pays. It may run behind steadily during January, February, and March and gain steadily during April, May, and June, and so on. At the end of the year it may find itself in just the same position with reference to the clearing house that it was in the beginning. In such a case, all its transactions have been liquidated without the use of cash and on a pure credit basis. This makes the value of the clearing-house system sufficiently obvious.

Significance of Clearings

From what has been said, it is plain that the clearing house, however great its labor-saving and cost-saving significance, is not an institution from which banks derive a direct profit. They would never carry on a clearing function simply for the fun of the thing but only as a result of business transactions. That means that the statements showing the amount of clearing-house transactions have an important business significance. When they are large they indicate that a great deal of business

is being done at the banks, and this of course means that a great many people are borrowing. The following table shows the transactions of the clearing house of the United States over a period of two years.

Comparative Statement, in Millions of Dollars, of Clearings of the United States for the Years Ended Sept. 30, 1913 and 1914

	Exchanges for year ending Sept. 30, 1913	Exchanges for year ending Sept. 30, 1914
New York	$ 98,121.5	$ 89,760.3
Chicago	16,018.2	16,139.9
Boston	8,326.2	7,866.7
Philadelphia	8,543.5	8,231.5
St. Louis	4,122.1	4,050.8
Pittsburgh	2,951.9	2,725.4
Kansas City	2,835.2	2,831.8
San Francisco	2,666.6	2,544.2
Baltimore	2,010.4	1,899.4
Cincinnati	1,329.7	1,331.6
Minneapolis	1,326.1	1,318.3
Detroit	1,286.9	1,385.6
Cleveland	1,271.2	1,271.1
Los Angeles	1,234.1	1,182.8
New Orleans	1,002.1	974.4
Total	$153,046.7	$143,513.8
Total, 148 other cities	20,146.3	20,461.9
Grand total	$173,193.0	$163,975.7

The New York Clearing House as seen from the foregoing showing is the most important clearing house in the country, and has larger transactions than others and gets along with probably a smaller amount of cash payments in the long run than any other considerable clearing house. There is another reason, however, why the New York Clearing House is of more interest and significance than the clearing houses of most places and why

its figures are better worthy of study. This reason demands a brief explanation.

X

"Out-of-Town Checks"

We have been speaking as if the bank clearing houses in any given place did business only for and with banks in that place. This is, to an extent, true of a considerable number of clearing houses but it is not true of the more important ones. In a former chapter some description has been given of the system whereby national bank reserves under the National Bank Act as it existed prior to the Federal Reserve Act are redeposited with banks in reserve cities. There is more reason for this system of redepositing than is to be found simply in the desire of the banks to earn interest on the redeposits they thus make.

Every bank is called upon to furnish a means of payment at a distance, and it does so by the use of drafts, which are practically checks upon another bank whose funds are more available to the customer or the man who is to be paid. Thus, a man in New Orleans who has bought goods from a New York jobber may go to his bank in which he has a deposit and ask that bank for a draft on New York. The bank practically draws a check upon the funds which it has on deposit with its correspondent in New York. The New Orleans merchant takes this draft and mails it to his creditor in New York, who then deposits it in his own bank.

The New York man may, however, be willing to accept a check on a New Orleans bank, in which case the New Orleans man, instead of securing a draft on New York, may simply send his own check on his New Orleans bank to his creditor in New York, who promptly deposits it in his own bank.

In this latter case, how is the bank which has received this New Orleans check on deposit to secure payment for it?

It does so through the clearing house. That is to say, it presents the check to the bank in New York which acts as correspondent for the New Orleans bank on which the check is drawn, and the bank pays it and charges it to the account of the New Orleans bank. If the draft is drawn directly on the New York bank by the New Orleans bank, the transaction is simpler. The correspondent bank in New York simply receives the draft on it and deducts the amount from the credit of the New Orleans institution.

Suppose, however, that the New York bank which received the check or draft on deposit were not a member of the New York Clearing House, how would it manage? It might send the draft in the old primitive way directly to the New York bank on which it was drawn and collect it in cash, but this is not the way that would be followed in practice. In practice, the check would be deposited with some bank which was a member of the clearing house, to the credit of the bank which received it. Then this bank would go through the process of collecting it. It might easily be that neither the bank on which the check was drawn nor the bank with which it was deposited was a member of the clearing house. In that case, the check would be deposited with a clearing-house bank, as already indicated, and collected from another clearing-house bank which was acting as the agent of the non-clearing-house bank on which the check or draft was drawn. Thus, the out-of-town check or draft, as well as the checks or drafts drawn on local non-member banks, would be cleared in exactly the same way and with no more delay

than if it had been directly drawn on and deposited with a clearing-house bank.

The clearing house thus serves an important function in clearing the funds which flow to the place where the clearing house is situated. As New York is to a large extent the financial center of the country, its clearings are of greater interest and importance than those of any other city, and throw more light upon the drift of business and the development of commerce than do those of any other place. Allowance should always be made for the effect of stock-market transactions upon the volume of clearings in the city of New York. When trade upon the Exchange is active, clearings are larger in proportion and vice versa.

Provision for National Clearance System

When the Federal Reserve Act provided for transferring the reserves of member banks to federal reserve banks, and limited the counting of bank balances with other banks as reserves, the question inevitably presented itself to the framers of the law how to provide for the collection of checks in the best manner. An analysis of the whole situation convinced those who were engaged upon the Federal Reserve Act that if the reserves were transferred, the task of collection should likewise be transferred—that is to say, if a federal reserve bank was to be the holder of the reserves of its member banks, it should also be called upon to take care of their collections. A consideration which strongly supported this view was the fact that by placing the task of collection upon the federal reserve banks, it would be possible to eliminate a very large part of the expense included under the existing collection system.

As has already been briefly shown at an earlier point,

the present collection system is costly because of the funds that must be carried, and because of the high clerical expense involved in routing and transmitting checks, and in getting back the proceeds resulting from their collections. If the federal reserve bank of a district included all the banks of that district, each keeping a balance with the reserve bank, and if the reserve bank undertook to receive from its members all checks upon other members, the process of collection would be effected by merely charging off or crediting, as the case might be, upon the books of the federal reserve bank, the incoming checks being distributed at the end of the day, week, or month to the member banks, just as any ordinary bank returns the checks drawn by its depositors whenever such depositors present their bank books for balancing. Furthermore, since the federal reserve bank, under the terms of the supposition, would be carrying a balance with every bank in the district, the fund already referred to would largely disappear.

Of course, so far as a federal reserve bank did not include in its membership all the banks of the district, the system would be imperfect, but it would render very much the same service, so far as it went, as if it included them all. By making business arrangements with clearing houses in those places where there are many state banks, the federal reserve banks would be able to perform much of the work that would have fallen to them under a condition where all banks of the district were included in their membership.

Shortly after the Federal Reserve Board was organized, it received applications from two districts—those of Kansas City and St. Louis—for permission to undertake the general clearing of checks drawn upon their member banks. This was granted, and the two banks in

question promptly undertook to receive on deposit at par, without charge for collection, any checks originally drawn on the banks in their respective districts. The plan was highly successful from the start, and proved very acceptable to member banks of both districts.

In other districts, there was reluctance to undertake the work at so early a date, and it was felt by some that there was serious legal doubt of the power of either the Federal Reserve Board or the federal reserve banks to compel member banks to permit items drawn on them to be charged against their accounts by federal reserve banks immediately upon date of receipt. Ultimately, therefore, a so-called "voluntary" system of collecting and clearing checks was inaugurated in practically all the federal reserve districts. Federal reserve banks agreed to receive from their members checks and drafts drawn on other member banks who had assented to the plan, and to credit or debit them at once as the case might be. This system took effect for the most part during June, 1915, and was subscribed to at the outset by a varying number of banks in the several districts, the total number, however, assenting to the plan being only a small fraction of the total number of banks in the federal reserve system.

Gold Settlement at Washington

It was seen by the Federal Reserve Board that the intra-district plan would probably not work well unless some system were devised for the clearance and collection of checks between districts; and consequently the Board had, at an early date, taken up the question of establishing a central clearing fund in the hands of the Board itself. Plans for such a fund had been framed by a special committee of investigators named by the organ-

ization committee appointed under the Federal Reserve Act; and the plan which had been devised by this committee, as set forth in their report, was subsequently taken as the essential basis of the Board's plan of clearance. A committee representing the governors of reserve banks co-operated in arranging details of the plan, but no important change was introduced into the general idea.

The fundamental conception was that of a deposit of gold to be made by each federal reserve bank with the Federal Reserve Board, the actual gold being held in sub-treasuries for safe-keeping, while the Board itself merely held possession of certificates representing the title to the gold. Each federal reserve bank continued to carry its gold in the Gold Settlement Fund as a part of its reserves, representing it in this way on its books. Then from week to week the amount of the items due to other federal reserve banks was to be telegraphed to Washington, and there offset on the books of the Gold Settlement Clearing Fund. The result would be to bring about a general cancellation of the bulk of the claims between federal reserve banks.

From one point of view, there was thus created a general national clearance system, although this was limited in its scope by the extent of the clearing carried on in the several districts under the intra-district clearance plan. It will be observed that there was still lacking any system for inter-district clearance—that is to say, no plan had been devised for the depositing of checks with a member bank, if they had been drawn upon member banks in other districts. The lack of such a provision prevented checks thus drawn from going through the federal reserve bank in the district in which the recipient of such checks was situated. That is to say, there is as

yet under the federal reserve system no plan whereby a man living in New York who receives a check on a San Francisco bank can deposit this check with his own bank in the expectation that the latter will collect it through its own federal reserve bank.

The ultimate success of this new clearance system, both intra-district and national, must of course be somewhat dependent upon the extent to which banks come into the system. This is not merely because of the desirability of having the transactions constitute a large proportion of the total, but because the success and economy of the plan largely depend upon its being complete. In order to have the checks and drafts offset one another, both sides of the debtor and creditor equation must be represented. A, for example, who draws checks on his bank to the extent of $500 per month for the payment of expenses, must receive $500 per month from some other source in order to restore his account; otherwise his bank balance will shortly be exhausted. Taking the country as a whole, checks and drafts do thus offset one another to a large extent, and if a plan of general balancing can be developed, the result will be to eliminate a large proportion of the cost of collection. As the number of banks which are members of the federal reserve clearing system increases, the advantage and economy to those already included in the system will correspondingly increase.

Strengthening Confidence

In normal times, the operations of the clearing houses of the country go on as has been explained, steadily and silently, without any display and without the knowledge of the general run of the community. Very little cash is used and the whole mechanism is primarily a labor-

saving and cost-saving device. But times may come when banks get into a precarious condition and their reserves run low. The public may hear rumors of the situation, and, alarmed for the safety of their funds, they may begin to stop depositing in a given bank or banks, checking out what they have there or possibly even drawing it out by actually going to the bank and demanding currency.

The latter operation is the familiar "run" on the bank, but the silent steady drain which comes from failure to deposit and the checking out of whatever credits men may have, such checks being deposited elsewhere, is far more likely to be fatal to the institution. Where this occurs and a bank or group of banks is on the downward grade in the estimation of the community, the situation finally comes to a point where the bank or banks that have fallen into discredit have a great many more checks presented against them at the clearing house than they receive against others. They are able to endure this for a time, but in the long run their credit with the clearing house becomes exhausted and perhaps their reserve in the vault dwindles toward the vanishing point. Then they have to confront the possibility that they will be unable to liquidate further claims against them through the clearing house. This would be practically a confession of bankruptcy and would result in closing the doors of the institution.

Long before this point is reached, usually, the facts have become known to the committee which has the management of the clearing house and it is obliged to consider what will be the effect of suspension on the part of the bank or banks which are in the condition indicated. Their fate is now practically in the hands of the clearing-house managers, for they can, by making arrangements

to relieve the weak banks of the necessity of paying cash, lift those banks out of their dangerous position and enable them to retain what coin and currency they have left. If such arrangements are made, the effect is instantly to strengthen confidence in the weak banks and to stop the drain on them. The facts in the case never become known and the weak institutions are tided over for a time until they have a chance to look around and see what they can do.

Will the clearing-house managers make the arrangements referred to?

This depends entirely upon the effect they believe the suspension of the given bank or banks will have upon the community. If the public mind is in an agitated condition, so that the suspension of one or more banks will lead to a run on the others, it is to the interest of the banks as a whole to hold up the weak brethren. So also, if large business interests are likely to become embarrassed through the tying up of their funds in a weak bank, support of that bank is a desirable plan. If times are normal, business confidence is high, and a bank's suspension will affect only a relatively small number of people the clearing-house managers will probably calmly say to the weak institution that the best thing it can do is to close up and go out of business.

Because of the fact that such decisions are not always wisely taken, because clearing-house organizations are local only, and because of the public character of the function thus exercised, the Federal Reserve Act provided for federal reserve banks whose main purpose it is through the rediscount process already described to relieve banks that are in difficulties and thus to afford some regular and steady means of accommodation other than the clearing house. The new banks when fully

rooted will therefore naturally take over more and more of the clearing-house function just set forth.

"Clearing-House Certificates"

There have been many times, in the past half century, when the clearing-house managers have practically been called upon to exercise the rediscount function of a central banking mechanism by making arrangements to enable an embarrassed bank or banks to get past a danger point. Of course such weak banks had a substantial amount of assets. They were not perfectly rotten or they would have gone out of existence before. The trouble with them was not that they had no property but that they had no adequate cash and could not convert their property into cash owing to the condition of stringency in the market. If, however, other banks which had claims upon them were willing, instead of being paid in cash, to be paid in titles to assets or property, the drain of money from the weak banks would be stopped. They could then pay their debts to other banks by giving them titles to part of their assets.

This necessitated some preliminary arrangements. The clearing-house managers have usually under such conditions authorized banks which needed assistance to bring securities or commercial paper to them for examination. Then, if the securities and paper were found to be of good quality, the clearing-house managers issued to the bank or banks that needed aid "clearing-house certificates" equal to 75 per cent of the face value of the securities left with them. Thus, if a bank brought in 100 bonds of $1,000 each in value and these bonds were approved, the bank would receive $75,000 in clearing-house certificates. It would take these certificates, leaving its bonds in trust with the clearing-house com-

mittee, and when claims against it were presented by other banks it would pay them in clearing-house certificates. A heavy interest was charged by the clearing-house committee for the issue of these certificates and this made it desirable for the bank which had obtained the accommodation to liquidate as soon as possible, take its securities home again and retire the certificates. This has taken a longer or shorter time according to the degree in which the bank had become involved and the difficulty it had in realizing on its assets. Clearing-house committees have, in time of extreme distress, gone even further and drawn coin from the reserves of the strong banks in order to build up the reserves of the weaker ones sufficiently to tide them over a run originating with frightened depositors, giving clearing-house certificates to the strong banks in lieu of the coin thus taken.

Certificates an Extreme Remedy

Of course the issue of clearing-house certificates in this way was an extreme remedy intended to meet a peculiar set of conditions. The banks of the United States resorted to this remedy on several different occasions in order to relieve panic and banking difficulties. The last such occasions were in 1907 and 1914 when an immense volume of clearing house certificates was issued for the purpose of enabling the banks to liquidate their obligations. The effect was, in every case when the scheme was tried, to give the public the impression that the banks were now banded together for mutual protection and that every bank was practically as strong as the combined banks of the community. This helped to stop the runs on the banks and to bring about a more placid state of affairs.

The success that has attended the use of clearing-

house certificates has in years past led some persons to propose plans whereby the use of such certificates should be rendered easy and the banks should be encouraged to put them out whenever they seemed to be desirable. The effect of such a step of course would be the same as that experienced by the individual who, because a strong stimulant helped him on one occasion repeats the dose every day and thus becomes habituated to it, thereby losing its beneficial effect. It is obvious that the success of the clearing-house idea has been found entirely in the fact that in the main the banking system was sound and that all that was needed was a plan for massing the combined strength of all the banks behind any weak institutions that might otherwise have gone to the wall. It is well to remember that the application of this extreme means of relief in such a way as to make it commonplace and to lead the banks to look for it whenever they get into the slightest trouble would take away the benefit otherwise likely to accrue. In spite of these considerations however, the commercial panic of 1907 led the United States to take a step in the direction of the habitual use of clearing-house certificates or something analogous thereto.

"Emergency Notes"

This step was taken in 1908 when the country had been thoroughly alarmed by the disastrous panic of the preceding year and had not fully recovered from its effect. There was a demand for some currency legislation that would make it possible for the country to get a sufficient supply of circulating medium in times of panic or stringency. After a long struggle in Congress during the winter of 1907-1908, the currency law of 1908, known as the Aldrich-Vreeland Act, was enacted.

This law provided that so-called "national currency associations" might be organized by any number of banks not less than 10 whose joint capitals amounted to not less than $5,000,000. These associations were authorized to receive from the constituent banks commercial paper up to 30 per cent of the combined capital of the banks, or bonds and other securities up to a gross total not exceeding 75 per cent of the combined capital. Then the associations were entitled to apply to the Secretary of the Treasury for notes and the Secretary was authorized to issue such notes to the association demanding them. The idea was that the association would then apportion these notes to the banks that wanted them and these banks would use them in paying their debts to other banks or in satisfying the demands of depositors.

The act also provided for leaving bonds of approved kinds issued by states, counties, municipalities, etc., with the Secretary of the Treasury and receiving from him in exchange notes up to 90 per cent of the value of such bonds deposited with him. Banks could get notes in this way on their own individual responsibility and without joining a national currency association. A heavy tax, running up as high as 10 per cent per annum, was imposed on the notes thus issued and they were to be an emergency or panic currency.

This was the principle of the clearing-house certificate carried a step further and employed for the purpose of creating a special kind of note which could be generally used. It was a defective expedient, theoretically, because it retained the idea of a special security behind notes in the form of bonds while it loaded down the process of issuing notes based on commercial paper with so heavy a tax that it would be only under special circumstances that a borrower could afford the use of the notes.

The banks, however, did not like the provisions of the law and at the start were especially antagonized by the fact that there was no way for a bank to get out of a national currency association when it had once got in. It had to stay, and would presumably have to take whatever in the way of joint responsibility for "emergency notes" might be meted out to it by the other banks in the organization. For these reasons, no notes were taken out by national currency associations prior to 1914, the year of the European war.

War Finance

In 1914, however, on the sudden outbreak of war in Europe, the banks were driven to make use of the Aldrich-Vreeland notes. Upon the outbreak of the war, it was at once evident to all that very striking changes would result in every department of business life. There was no knowledge of the strategy or probable methods to be employed by any of the belligerents, and the general attitude of the business community was based upon the assumption that commerce would, for a time at least, become nearly impossible. As a corollary to that assumption, there prevailed the belief in many circles that American indebtedness to foreign countries would have to be liquidated in cash, and that this process would result in draining away from the United States a corresponding amount of gold.

It was natural, therefore, that the first phenomenon of the war should be the suspension of dealings which it was believed would promote this gold movement, or would cause more serious trouble in any direction than would otherwise be inevitable. The closing of the principal stock exchanges of the country almost immediately upon the definite announcement that the war was una-

voidable was thus dictated by two considerations: (1) the belief that prices for stocks and other securities would be reduced to a point so low as to bring about the repurchase of the securities by Americans, who would then be obliged to pay for them in gold; (2) the belief that, in consequence of this reduction of prices, many bank loans based upon securities would have to be "called," thereby bringing about failures and incidentally assisting in the movement of specie out of the country.

In the case of the cotton exchanges, it was at once perceived that the cotton crop, which is so largely produced for export, could not now move abroad with any degree of facility, and that the demand for cotton would undoubtedly be slack. The very fact of the war, therefore, implied heavy reductions in the price of cotton, and the closing of the cotton exchanges was a measure of self-preservation on the part of the operators, who decided to protect themselves against the inevitable failures which would result from the fulfillment of existing contracts at very low prices. To close the exchanges would result in gaining time, and would, therefore, enable operators to meet their maturing obligations, besides perhaps affording an opportunity for actual recovery in cotton prices.

This very fact, however, of the closing of the exchanges and the consequent removal of any other established method of determining prices for standard securities and for a staple like cotton involved most profound and far-reaching effects. The exchanges had closed in previous years, but never for the reasons which now controlled them. That they should close because of the fear of failure and the loss of gold implied a serious danger of disaster which appealed powerfully to the public mind,

and which presented a problem that could not be explained away. The fact that, coincident with this closing of the exchanges, international trade was practically suspended for several days, and was seriously interrupted for several weeks, until British vessels assumed virtual control of the North Atlantic, tended greatly to increase the public anxiety. It formed apparently good ground for the suspension of business operations and for the non-fulfillment of contracts, even when the very difficult conditions did not themselves compel a recourse to such methods. The fact that foreign countries had adopted legislation deferring the date when debts need be paid or contracts fulfilled, although not paralleled here, produced a sympathetic influence upon business in the United States, which practically resulted in the partial or tentative adoption of a somewhat similar relaxation of commercial requirements in many industries and branches of trade.

Even without the suspension of certain classes of trading throughout the country, partially due as it was to the frenzied demand of European holders of American investments for money, the strain thrown upon our banks as a result of the great change in conditions would have been enormous. The closing of the exchanges, as already seen, had relieved matters to some extent by enabling the banks to avoid the calling of loans, and thereby to avoid the necessity of forcing customers into liquidation, with the resultant disastrous effect upon themselves. But on the other hand, the suspension of operations and the corresponding loss by the public would, it was felt, tend to the hoarding of legal-tender money.

In order to meet this situation, the banks in many of the large financial centers sought to limit specie payments, taking out emergency currency and clearing-

house certificates for the purpose of meeting their indebtedness to the public and to one another. The national currency associations, which had numbered only eighteen up to the beginning of the war, rapidly increased until they aggregated forty-four; and prompt preparations were made in Washington for supplying emergency currency, under the terms of the Federal Reserve Act, to any such association as might need the notes.

At the same time, practically all the clearing-house associations of the larger cities arranged for the issuing of certificates. Congress, still further to facilitate the work, adopted on August 4 and 15 measures amendatory to the Federal Reserve Act, which had itself amended and extended the Aldrich-Vreeland law. Under these latest amendments, very much greater latitude was given for the issuing of currency, and the cost of such issues was reduced by lowering the rates of taxation collected upon such emergency issues. These acts practically gave free range to the taking-out of emergency bank notes, and during the weeks succeeding their adoption, and prior to the opening of the new federal reserve banks, more than $350,000,000 was issued, the ultimate amount of the issues aggregating $380,000,000.

Moratoria

War finance emphasized in a striking way the device of legal holidays or moratoria for the protection of hard-pressed banks. A moratorium is a governmental decree altering the terms of commercial contracts so as to give the debtor a legal right to delay meeting an obligation. Such schemes for avoiding disaster were resorted to fully by many countries, both peaceful and belligerent, at the outbreak of the European War. During the panic of 1907, the governors of a few states proclaimed banking

holidays of several weeks' duration to enable banks to adjust themselves to the critical conditions.

Other Associative Activities

As noted in an earlier section of this chapter, the banks of the country have attained a certain amount of joint action along lines other than those growing out of the clearing-house associations or out of any legislative provisions. The American Bankers' Association has done good work by bringing about an interchange of thought among bankers with reference to banking problems, by supporting or criticizing proposed legislation affecting the banks, and by bringing the banks together in certain ways for mutual safety and protection.

While such associations have no binding character, they do tend as already suggested to carry further the joint efforts which are exemplified in clearing-house associations, and to bring bankers into closer relations generally with one another. They also tend to stimulate and promote uniformity of practice in regard to banking methods and to make the better banking methods in vogue in various parts of the country apply in other places where their introduction would otherwise be considerably slower. They have the further effect of making the problems of certain groups of banks known to other banks and thereby tend to bring about good relations between national and state banks and banks of all classes on the one hand and trust companies on the other.

It is probably true that banking has a more uniform code of ethics and of practice than any other occupation of a commercial character. This is the result of the movement toward association and co-operation in banking.

TEST QUESTIONS

1. How do associative efforts in banking compare with similar efforts in other lines of business?
2. What is a clearing house?
3. How is it organized?
4. Explain the process of clearing in a clearing house.
5. How are balances settled at a clearing house?
6. What is the business significance of a clearing-house report?
7. Why does the New York Clearing House have special significance for the entire country?
8. Explain the provisions made by the Federal Reserve Act for a national clearing system.
9. How can a clearing house assist banks that are hard pressed?
10. What are clearing-house certificates? Just how are they issued and used?
11. What important services besides clearing does a clearing house perform?
12. What is a moratorium?

CHAPTER X

BANK ORGANIZATION AND ADMINISTRATION

Organizing the Bank

As has been seen in a former section, the modern bank is usually organized as a corporation. This implies the existence of all the features of corporate organization which exist in the case of other concerns. There must be a specified number of incorporators and these incorporators must elect officers and carry on business in a certain way. Probably an idea of how banks are organized under appropriate legislation in the United States can best be obtained by studying the organization of a bank under the National Bank Act.

The National Bank Act, for reasons which will later be detailed, makes certain requirements concerning the amount of capital that banks located in towns or cities must have. It also makes certain special requirements that need not be considered save in outline. We will endeavor merely to set forth those features of national bank organization which are essential and characteristic.

The fundamental requirement in organization is the contribution of an actual paid-up capital by a given number of persons, set at not less than five in the National Act. Any five persons may enter into articles of association, and when their application for a certificate of organization is approved by the comptroller of the currency they may begin business. The organization certificate must specify the title, location, amount of capital

stock of the bank and number of shares into which divided, the shareholders, and the object of the certificate, all of which as already stated must receive the approval of the comptroller. The requirement of the National Act is that the capital stock of each association shall be divided into shares of $100 each, which are to be deemed personal property and transferable on the books of the association.

The concern is actually organized by the election of at least five directors who hold office for one year and are elected by the shareholders at a meeting to be held at any time before the association is authorized to begin business. The directors are obliged to own at least ten shares of the capital stock of the bank, unless the capital is below $25,000, in which case each must own at least five shares. Each shareholder has one vote for each share of stock and may vote in person or by proxy.

Payment of Capital

At least 50 per cent of the capital stock of every national bank has to be paid in before the concern is authorized to begin business. The remainder must be paid in installments of not less than 10 per cent each, at least once each month. This would mean that the concern would actually have paid in to it, in cash, the total face value of its capital stock by the expiration of five months from the time the bank is organized. Some of the state laws are even more stringent upon this point, requiring that the entire capital stock must be paid in before the bank is authorized to begin business.

The National Bank Act (and every other banking law which is properly drawn) is particularly careful to specify the requirement that the capital stock shall be paid up entirely unimpaired at an early date in the bank's

career. In times past, under loose banking legislation, banks have sometimes opened with little or no capital, simply accepting the notes of the shareholders for the bulk of the subscriptions they made and expecting to get funds through direct deposits made in the bank by outside customers. Such a policy has invariably led to disaster, because the concern was usually unable to collect the installments due on the notes of the shareholders when the funds were needed and so had little to fall back upon; or, as was frequently the case, the same bad judgment which permitted the organization of the concern on a purely credit basis and without actual capital, led to the making of bad loans, the failure to compel the stockholders to pay in their installments, etc., so that as a result the banks quickly came to an unfortunate end. At the present time, the actual early payment of the full capital stock in cash is a universal prerequisite to engaging in any sound banking business.

Officers of the Bank

The directors of the bank, although fundamentally responsible for and charged with the control of the bank to which they belong, are not its officers in the technical sense of the term. A set of officers must be chosen by the directors, and to them is given the duty of actually managing and carrying on the business of the bank.

The President

The National Bank Act requires that one of the directors, to be chosen by the full board of directors, shall be named president of the board. The duties of such a president vary considerably with the size of the bank, its location, and other factors in the situation. The president may be merely an ornamental figure, or he may be

the actual working head of the organization, looking after the details of its business and in a large way directing what goes on. In any bank of considerable size, his work is that of general superintendence rather than that of particular attention to given transactions.

Within recent years, the duties of the president have, however, become much more clearly defined by the courts than they formerly were. "When he is the active head of the bank he has all the authority which law and custom confer on the head regardless of the name of the office." In many cases, the president has risen to his position through various subordinate places and is familiar with the workings of the different departments. At times, however, the president is largely a figure-head and has no technical knowledge of the affairs of the institution. In other cases he may devote himself to blocking out lines of policy, investigating general conditions in the bank, and instituting needed economies and changes of organization. An important function performed by the president is that of developing methods for extending business and enlarging the number of depositors. In the large cities, the establishment of good relations with other banks, some of which may become depositors—usually large ones—is important. The bank has, to a certain extent, a legal liability for the conduct of its president, and thus next to the board of directors he is the important factor in the concern.

Vice Presidents

A bank may have one or more vice presidents who may act successively in the absence of the president or of other vice presidents. Their legal status is not precisely the same as that of the president, depending in part upon the by-laws of the institution as well as upon its cus-

toms. In a good many cases, vice presidents are elected largely for the purpose of recognizing various large stockholding interests and with the idea that they may be made better acquainted or better satisfied with the management if they are thus represented. Sometimes the names of these men are used on letterheads and in advertisements to add prestige to the bank, or they are employed as solicitors of new business. Or, again, the vice presidents may be actual working officers of the bank and although called by the name of vice president they may really perform the duties of other officers, the title of vice president being merely a compliment and an indication of their importance, usually in relation to the stockholders, in the conduct of the bank.

It is not desirable that an institution should have many officers who are purely ornamental or nominal or titular. Hence the National Bank Act provides for only one vice president, giving to the board of directors the power "to appoint a president, vice president, cashier, and other officers, define their duties," etc.

"Other Officers"

The "other officers" who are thus generally referred to in the national banking law vary a great deal from bank to bank, their number, the distribution of duties among them, etc., being left to be determined in the individual case as is necessary under varying conditions of business, bank organization, location, and the like. It is possible, however, to indicate the chief types of officers who are usually found in banks. Of these the cashier is the most important, being often the real executive head of the bank. Next in rank to him comes the paying teller, whose duty it is to disburse funds upon demand. The receiving teller who takes in deposits and performs

other duties ranks usually after the paying teller. In larger banks, a note teller also exists and has charge of letters and deals with promissory notes liquidated at the bank. In some banks, a discount clerk is employed, although in the smaller ones he usually is identical with the note teller, both kinds of duty being performed by one man.

These various officers may have large staffs under their direction, the size of such staffs depending upon the business of the bank, the magnitude of its operations, etc. But, whether their staffs be large or small, or whether the work in each division be done practically by one man, the type of organization is the same. Subordinate, however, to these "officers" are a number of employees who facilitate their work. Probably the most important of such subordinate divisions is the bookkeeping department, which is usually in charge of the head bookkeeper assisted by such clerks and subordinate workers as may be needed. There may be various other departments, such as a special credit bureau in the bank, and a collection department. This is largely a matter of individual organization and depends on the bank for its details.

Charting the Organization

The suggested executive and clerical organization for federal reserve banks recommended by the Federal Reserve Board (Fig. 2) contains valuable organization ideas for other institutions. A simple outline showing the chief officers and the leading functional lines of work in an average-sized bank is shown in Figure 3. These charts may serve as the basis for an actual organization.

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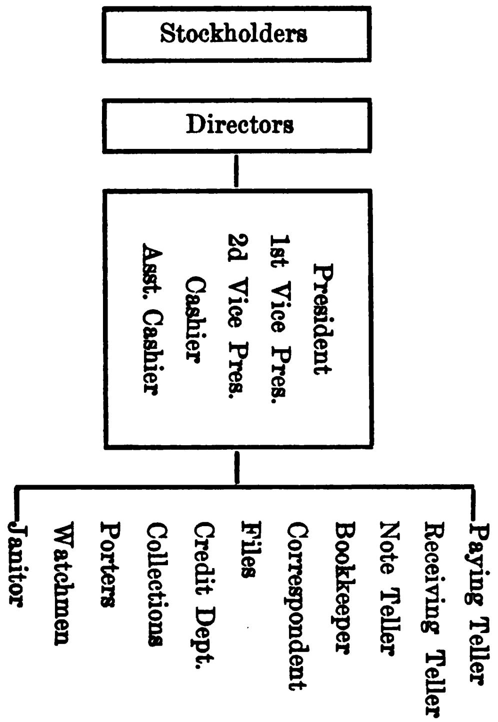


FIG. 3.—Suggested Organization for a Bank

CASHIER'S DUTIES

As is well noted by Mr. Albert S. Bolles, "The duties and authority of a cashier have been clearly determined by practice and legal decision." The cashier must give a bond, to be signed by one or more sureties or by a surety company whose fee may or may not be paid by the bank itself. The cashier, holding office next after the higher officials of the bank, has an annual tenure which, however, is terminable at the pleasure of the appointing power.

It is the duty of the cashier to keep a record of the directors' meetings and to sign the certificates of stock, the checks drawn on other banks, and the drafts and notes that need indorsement before sending them away to another bank for collection. The cashier is also heavily burdened in the larger banks with the general conduct of the bank's correspondence. Besides this he has general oversight of the internal affairs of the institution, the payment of expenses, the condition of depositors' accounts, etc. It may be advisable to give the cashier the aid of one or more assistant cashiers who are then subordinate to him and take over such portions of the work as he may intrust to them. He is primarily responsible for all the actual transactions after lines of policy have been blocked out by the president and vice president. He passes on all new deposit accounts, signs drafts for the disbursement of funds, and is custodian of the company's assets and the securities contained in the vaults.

In trust companies, there is usually an officer called a secretary who performs the functions of a bank cashier in keeping the minutes of the board meetings, attending to correspondence, etc., while the officer called cashier in a bank is known as the treasurer in most trust companies.

Paying Teller

The paying teller, having general charge of the custody and disbursement of funds, exercises the primary executive control of the outward flow of money. In order to focus responsibility as far as possible, therefore, an effort is usually made to confine the business of the paying teller to one person, but in the larger concerns there may be more than one, for reasons of necessity. The paying teller cashes the checks which are presented for

payment and his principal occupation consists in paying such checks. This makes it necessary for him to be familiar with the signatures of the depositors, and also to know much about the condition of their accounts. Otherwise, he might pay checks that were in excess of the amount to the credit of the drawer of the check. Where checks are presented by persons other than the drawer, it is necessary to look carefully at the indorsement and to make sure that the persons who present the checks are entitled to the funds and that the indorsements are such as fully to protect the bank.

The paying teller's accounts necessarily show the amount on hand, and when this has been combined with the day's receipts and the day's payments subtracted therefrom, the resulting balance is equal to the amount of cash on hand and in bank. This it is desirable to show in some detail.

In case a depositor desires to secure a draft on some distant institution or to have his check certified (so that it becomes an obligation of the bank and the person receiving it is directly informed that it is acknowledged as such by the institution), it is the duty of the paying teller to arrange these matters.

Receiving Teller

The work of the receiving teller supplements that of the paying teller. He has charge of the receiving of deposits with the bank. According to general practice, the constituent elements of these deposits are listed by the depositor himself on a "deposit ticket" which he fills out with his name and the amount of coin, currency, and checks issued by various persons or firms which he desires to deposit to his own credit in the bank. The depositor is provided with a bank book in which are

recorded as a lump sum the totals of the deposits made by him. He hands both bank book and deposit slip to the receiving teller, accompanying them of course with the sum in coin, currency, checks, or other negotiable papers, which he wishes to deposit.

It is the duty of the receiving teller to accept these checks and currency and then to examine them in comparison with the deposit slip in order to make sure that the coin and currency is in the amount specified, that it represents good money free of counterfeits, and that the checks are properly indorsed. In the event that the depositor obtains credit by leaving his own note with the bank, the amount of such note is credited to him in his deposit book just as would have been done with coin or currency. The receiving teller, like the paying teller, must be able to recognize the signature of the depositor, since it is his duty to make sure that the depositor's own signature is placed upon the back of checks, drafts, etc., requiring such indorsement, in order that the depositor may become immediately responsible in the event of a check being returned. The writing up or balancing of pass books (bank books) is sometimes done by the receiving teller but, if possible, should be done by someone else in order to test the accuracy of the work of the receiving teller.

Note Teller

Every bank holds many promissory notes which it has discounted or which represent loans it has made to borrowers. Every bank also has a certain number of promissory notes which have been left with it by individuals for collection in order that they may receive credit for the amounts as soon as the notes have been cashed or paid by those who originally made them. These notes

are placed in the custody of the note teller and it is his duty to enter remittances, give notices to makers of notes, attend to the protesting of unpaid notes, etc.

The note teller keeps track of the notes in his custody by making entries in a book kept for that purpose, arranging them alphabetically. If collateral security is attached to the note held by the bank, the kind and amount of such security is also listed by the note teller and when the note is paid and the collateral returned, the owner signs his name upon a line corresponding to that on which the description of the collateral appears, thus indicating that he has received back the securities which he left for the protection of the bank. When a note is paid the note teller stamps it "Paid" and returns it to the maker, who may then destroy it if he chooses.

Many persons make their notes payable at the bank with which they keep their accounts, and they may then be paid by the bank and charged to their account so that it is not necessary for them to trouble themselves about anything further than maintaining their credit at a sum which will easily cover all the obligations that come in for liquidation.

In the event that a note is not paid, the note teller may present it through a notary public at the place of business of the maker or wherever it is made payable. Then, in the event of a refusal to pay, the note is attached to a printed legal form, called a protest, describing the facts in the case, and a notice is sent to all indorsers informing them of their liability. The notary is usually an officer and employee of the bank, but there is a distinction between his duties as a bank official and his function as a public officer, the latter taking precedence of or superseding the former whenever necessary.

The Discount Clerk

Where for convenience, owing to extensive business, a distinction is made between the note teller and the discount clerk, the function of the latter is to keep a record of notes offered to the bank or of notes immediately discounted. When record has been made of the maker's name, the names of the indorsers, the place of payment, the time due, the amount of the discount, and the net proceeds, the discount clerk takes charge of the notes themselves, putting them away in proper form for preservation.

It is usual also to have the discount clerk actually take charge of the bills receivable of the bank, handing them to the note teller (whose duties have already been described) upon the day when they mature, and leaving it to the latter to see after their collection. The discount clerk stores the bills receivable in a special part of the bank vault, and it is customary for officers desirous of examining the paper to have it shown to them by the discount clerk, thus maintaining the latter's personal responsibility for the various items of paper passing through his hands.

It falls to the discount clerk in the larger banks to notify borrowers of the result of their applications for loans or discounts after the directors or officers of the institution have passed upon them favorably or unfavorably.

Bank Bookkeeping

The study of bank bookkeeping is an elaborate subject in itself and cannot be dealt with in detail at this point. While there is a strong tendency to simplify the records of banks as far as possible, the larger institutions are

obliged to employ a tolerably extensive and complex system. All banks keep certain books for their own particular use. One of these is the stock book, in which are recorded the names of the shareholders and the number of shares held by each. In a collection register are kept records of all collections, whether of checks on banks in the same city or of those of banks in other cities. In a book or series of books usually known as the discount register the various notes discounted are recorded, with the name of the maker and indorser, the date of the note, time of payment, number of payments made, etc.

The ledgers of the bank, often classified alphabetically and sometimes divided into country and city, in town and out of town, are intended to record the business of the bank with every depositor. It has been seen how the depositor leaves with the receiving teller a ticket verified by the latter upon which he has classed the different items of coin, currency, checks, drafts, etc., which he has left with the bank for his credit. In the same way it has been seen that in drawing out funds he usually gives a check. Many banks post these checks and deposit tickets directly into the ledger, crediting the depositor with what he has left at the bank and debiting him with the amount of the checks which he has deposited for cashing or which he has given to others who have themselves deposited them or had them cashed.

In a general ledger, the accounts relating to the business of the bank as such—its capital and surplus, its profit and loss, the value of its bonds, its real estate, its fixtures, etc.—are carried. The general ledger thus contains the gross results of the bank's business massed together in such a way as to show aggregates of transactions.

Many minor records of detailed books of statements,

etc., are kept by different banks according to the nature of their business. But, in every bank, the general scheme of accounting is necessarily in accordance with the same main plan.

TEST QUESTIONS

1. What provisions does the National Bank Act make concerning the capitalization of a bank?
2. What provisions does the Act make concerning the officers of a bank?
3. Who are the chief officers of a bank?
4. What are the duties of the cashier? the paying teller? the receiving teller? the note teller? the discount clerk?
5. What are the chief books of a bank?

CHAPTER XI

CAPITAL AND RESERVES

The Bank as a Going Concern

When it has been decided to organize a bank in a community, several questions will at once present themselves. The first is whether the capital to be employed should be of a given amount. This is, broadly speaking, the problem of the amount of banking capital needed in a community under given conditions. What is needed is ultimately dependent upon the activity of the business of the community, for the proportionate amount of capital which should be devoted to banking as compared with other occupations can be definitely determined. Experience only can show what amount of banking capital is actually needed in any given place at any given moment and how this capital should be divided among the different classes of banks.

In every place, there is a gradual ebb and flow of banking capital. Sometimes too many institutions are in existence, and then some are gradually driven out or absorbed by the others. The weaker banks in such a community, finding that they are not earning sufficient returns to make it worth while, may decide to give up the struggle, and transfer their assets to the other banks. In the same way, if there is too little banking capital in a community, the effect is to cause a strain on the capital already employed, as a result of which either too many loans are granted and a bank becomes unduly

"extended," as the phrase goes—i. e., has too many loans outstanding for the amount of reserve, and hence is in a dangerous condition—or else it has to turn away would-be borrowers who have perhaps offered very fair security. Or it may be that the bank, finding business abundant, raises its rate of interest so high that many borrowers who would be glad to get accommodation do not find that it is worth their while to do so. As a result of one or all of these conditions, there may be a demand for a new bank. The question whether such a bank will be organized is in practice dependent upon the ideas of local capitalists as to the amount of business offering, the rate of profit that is being made by existing banks, and other factors of the same kind.

In general, it may be said that there is a distinct relationship between the amount of the capital and the character of the business transactions of the community. A bank with $50,000 capital would not do well in Wall Street, because it would not be able to make a single loan large enough to meet the wants of the average borrower. A bank of $1,000,000 would not do well in the country town because the business to keep that amount of capital employed would not offer itself. This is the reason why the National Bank Act attempts to regulate in a very general way the amount of a bank's capital with reference to the size of the place in which it is located. But within the broad limits set by this or any other law, there is a large field in which the conditions of business, the judgment of the organizers of the bank, and other factors of similar type must control.

Creating a "Surplus"

If a bank starts with, say, $100,000 capital, this does not necessarily mean that the money thus contributed is

its only resource. It may be that depositors will promptly leave with it a quantity of coin or currency, in which case its available cash means for carrying on business are increased to a corresponding extent, though of course correspondingly subject to withdrawal by depositors at any time.

The bank, however, may add to the actual capital it employs by refraining from dividing its profits. That is, if at the end of a year a bank finds it has $20,000 in profits, it may decide to divide $5,000 as dividends and hold the other $15,000 for permanent use in the business. In such a case, although the funds are not technically a part of the national bank's capital, they are so in practice. Thus, a bank with a capital of $100,000 and a surplus of $20,000, is in the same position so far as business goes, as a bank with $120,000 capital.

The surplus, however, has a different legal status from the capital. The National Bank Act provides that "the directors of any association may semi-annually declare a dividend of so much of the net profits of the association as they shall judge expedient; but each association shall, before the declaration of a dividend, carry one-tenth part of its net profits of the preceding half year to its surplus fund until the same shall amount to twenty per centum of its capital stock." This means that the framers of the National Bank Act thought it was desirable to have a surplus of at least 20 per cent shown by every bank before the whole of its annual profits begin to be divided.

There is a good reason for the idea in the fact that the surplus acts as a buffer in the event of serious loss or the failure of certain assets to materialize as they had been expected. In the case of the $100,000 bank with $20,000 surplus, if a dishonest cashier disappears with

$15,000 in cash, the bank is still left with its capital intact and $5,000 of additional funds. Had the bank possessed no surplus, the capital would have been impaired to the extent of $15,000, and the result would have been a necessary reorganization for the purpose of either reducing the face value of its capital stock to an amount corresponding to the reduced net assets (in this case $85,000) or else a call upon the stockholders to make good $15,000 in pro rata contributions in order to restore the capital to its face amount. There are other reasons why it may be of advantage for a bank in the national system to have a surplus, but these are of a more special and technical sort and will not be discussed at this point.

It remains to be added that many banks do not wait for the slow process of accumulating a surplus, but when they start business the stockholders put in a paid-up surplus. Thus a bank may start with $100,000 capital and $100,000 surplus instead of starting with $200,000 of capital. Inasmuch as national bank stockholders are by law liable to an amount equal to the face of their capital stock in the event of failure, this mode of organization curtails the liability they would be under, as with $100,000 of capital stock and $100,000 of surplus their joint total liability is only $100,000 in addition, whereas had they started with $200,000 of capital their joint additional liability would have been $200,000.

Undivided Profits

Most banks carry on their statements an item additional to capital and surplus called "undivided profits." This item merely represents what is left over from various periods of dividend-paying at which the amount on hand has not been such as to afford an even distribution. Thus, suppose that a given bank with $100,000 capital

finds at the end of a year that it has $6,766 of profits. It might declare a dividend of 6.766 per cent but it is much more likely to declare a dividend of 6 per cent and carry the remaining $766 as undivided profits. This would not account for the fact that, in some banks, the item undivided profits becomes very large. It might be expected that, if the matter of regularity alone were considered, undivided profits would be divided whenever they reached a figure permitting of an easy division. The fact is that the proprietors of bank stock prefer to see their dividends upon a level basis rather than fluctuating from year to year, as the former policy gives a clearer and better idea of the value of the stock.

These undivided profits, therefore, really constitute a fund which acts as a reserve for the purpose of equalizing dividends. Thus if, in 1900, the supposed bank found itself with $6,766 of profits and the following year with $5,234, it would be able to declare a flat 6 per cent dividend each year, which would be much better for the value of the stock than to divide the total profit each year, thus changing the percentage each time. It may be, however, that a bank has, year after year, a steady excess of profits above what it regards as its normal dividend rate. In that event, it either ultimately raises its dividend to correspond, or else carries the accumulating undivided profits to surplus account, which practically makes them a part of the capital of the bank and places them in a position to pay profits additional to those earned on the capital. This will mean that, ultimately, since a larger amount of funds is employed in the business, a larger amount of profits will be earned, and consequently if the bank is honestly conducted larger ultimate dividends will be realized.

Conservatism in banking indicates the wisdom of

declaring dividends only to a moderate extent, gradually enlarging the surplus as business conditions permit of its profitable employment, and maintaining a small fund of undivided profits as a means of permitting the equalization of dividends over profitable and unfortunate years.

Reserve

To be classed with the problems relating to capital, surplus, and undivided profits, is the problem of reserve and its amount. From the general discussion of banking already presented, it will have been understood that the bank must always keep on hand an amount sufficient to enable it to meet its demand obligations at sight in cash. As was then pointed out, the amount thus needed varies a good deal from community to community and from bank to bank, depending upon the clientele of the bank and its methods of business. There is usually a given percentage of cash as compared with demand liability which is considered by conservative bankers to be necessary for their protection or which is prescribed by law to be carried in any case. This sum is usually referred to as the reserve, or the "lawful money reserve" of the bank. Its amount is supposed to indicate the danger line, beyond which business cannot be done with safety to the bank and its customers. How to maintain the reserve, what are the conditions that govern its amount, etc., are therefore questions which receive the serious attention of every banker.

The National Bank Act, in its anxiety to protect the creditors of banks, originally laid down precise rules in reference to the amount of reserve to be carried by such institutions, which are now in process of being altered under the working of the Federal Reserve Act. The old law recognized three classes of cities: (1) "central

reserve cities," which are three in number, New York, Chicago, and St. Louis; (2) "reserve cities," which now number forty-nine and are places of moderate size scattered over the country; (3) outside places, which include all other localities in which banks are situated. These last are usually referred to as "country banks," the term being used even if they are situated in places of considerable size which have not been "designated" as "central reserve" cities, or "reserve" cities.

Up to 1913, when the Federal Reserve Act was passed, the law provided that central reserve city banks should at all times keep on hand 25 per cent of their outstanding deposits in the form of legal-tender money; and that reserve city banks should keep on hand 25 per cent, but that they might be allowed to deposit one-half of this (12½ per cent) with central reserve city banks. Country banks were required to keep on hand 15 per cent, of which, however, 3-5 (9 per cent) might be redeposited with reserve city or central reserve city banks. From this it will be seen that, at any time, the banks of New York, Chicago, and St. Louis might be in possession of only 25 per cent of their outstanding deposits, and at the same time the banks of a large number of other important places might have only 12½ per cent of their outstanding deposits in cash, while all other banks might have only 6 per cent of their outstanding deposits in cash.

Experience indicated that in ordinary times these reserves were entirely adequate. In abnormal times the situation was totally different. The local bank might be heavily drawn upon by anxious depositors, in which case its 6 per cent of cash melted quickly away. It could then call upon the redeposits it had made with other banks, but if the drain was severe, even these did not last long and then the bank could get relief only by the sale of its assets

to other banks, provided the latter were willing to buy them. If they were not willing, the bank had to suspend or fail. Upon occasions when lack of confidence was general throughout the country, many banks were in that condition and then a general bank suspension usually supervened.

Origin of Reserve Grouping

This classification of banks, with the accompanying permission to the reserve city and country banks to redeposit their reserves in the way just discussed, did not arise on a purely haphazard basis, but grew out of the system of providing for domestic exchange, which existed at the time of the Civil War, when the National Bank Act was passed. Under the system of highly diffused banking which then existed, it had been found necessary for banks throughout the country to keep balances with banks at certain important commercial points in order to afford remittances to merchants. The proportions fixed by law in which the reserves of country and reserve city banks were allowed to be redeposited are said to have been computed as the result of an investigation of the average amount of such balances which had to be continuously kept with other banks by outlying institutions that were regularly called upon to provide exchange. The theory involved was that, inasmuch as a balance with another bank was presumably payable on demand, it was equivalent to cash in the vaults of the creditor bank, and should, therefore, be classified as "reserves."

There may have been some basis for this view so long as the accounts referred to were used merely for providing exchange. While that was the case the redeposit of reserves merely amounted to a temporary transfer, and the whole basis of the banking assets of the nation

consisted of fluid funds. A change in the situation was shortly introduced. Competition among central reserve city banks set in, the effort of the different banks being to obtain as large "out-of-town" balances as they could, in order that they might get whatever benefit arose from the holding of the funds and that they might draw to themselves the incidental business likely to result from the maintenance of relations with country banks and others which might have funds to spare or business to transact in the cities.

The great growth of stock market operations after the Civil War increased this competition, because it shortly appeared that by developing the call-loan system, it was, in ordinary times, safe for banks in central reserve cities, particularly in New York, to make large loans to Stock Exchange operators, with the expectation of promptly calling these in if there should be a sudden drain upon them from their country correspondents. In other words, the country bank placed its funds with the New York (or other reserve city) bank; this New York bank built up a large "line" of demand loans to stock exchange operators; the operators traded on the strength of the credit, and when called upon by banks to liquidate did so by selling their stocks and paying their loans, whereupon the banks found themselves in funds with which to meet the demands of their correspondents.

Practical bankers and students of the theory of banking agree that this system was unsatisfactory. In ordinary times when conditions were prosperous, there was no serious shock to general business as a result of it, but the effect was to produce temporary superabundance and temporary shortage of loans in the stock market, the result being that a demand for money in the interior of the country meant high rates of interest on the stock

exchange, and vice versa. The worst evil in the situation lay in the fact that there was a constant tendency to inflate stock operations and to raise prices thereby, the result being that as the maintenance of the market became more and more difficult, the strain on the banks was increasingly severe and their indisposition to part with funds correspondingly marked.

Moreover, in times of panic when shrinkage was imminent, the banks found it impossible to get their "reserve" funds out of the stock market securities in which they were practically invested through the call-loan operation, without producing so severe a shrinkage of values as to cause widespread bankruptcy. They were, therefore, obliged to resort to suspension of specie payments, and often did so.

Furthermore, the interior institutions in times of stock market activity frequently invested large quantities of funds (which ought to have been kept by them in their own vaults) in direct loans to speculators on the exchanges, their desire being to get the advantage of the high rates of interest which were prevailing there at that time. Undue stimulation to speculative operations and undue shortage of cash throughout the country, with a highly unstable reserve system, was the result of this method of operating.

Transfer of Reserves under New Act

In the Federal Reserve Act it was recognized that the essential remedy was the transfer of all reserve funds from institutions which were in danger of using them in investments that might become non-liquid and to put them in the hands of institutions which would keep them in a liquid form, using them only for the objects of strictly commercial banking. The Federal Reserve Act,

therefore, provided that after three years nothing should be counted as reserves by any member bank except either cash in its own vault or a deposit with the federal reserve bank of its district. While there was no express provision prohibiting the federal reserve bank of each district from paying interest on balances, it was the evident intent of the Act that no such interest should be paid, but that the balances with federal reserve banks should be carried there without any inducement or stimulus to member banks to employ them for the purpose of enhancing their income. Pursuant to this thought, the Act provided that immediately upon the organization of the federal reserve banks a specified amount of reserve should be transferred to these banks, another specified amount at the end of a year and a third installment a year later. At the end of three years the whole transfer would have been effected.

From the belief that by massing reserves in this way and making them really available for the purpose for which they were intended, the total amount of money actually required to be held for the purpose of safety would be much smaller than heretofore, the Federal Reserve Act materially cut down the percentage required by law to be held by member banks, reducing it to 18% of demand deposits in central reserve cities, 15% in reserve cities and 12% in country banks. The Act further provided that where banks held time deposits upon which thirty days' notice could be exacted by the member banks, only 5% of the outstanding liability need be kept. The following table will summarize the statements that have been made in the foregoing pages by showing in comparative form the percentage requirements for bank reserves and the places where they are to be kept according to the Federal Reserve Act:

I. Banks in Central Reserve Cities (New York, Chicago, St. Louis).

Amount required: 18% of demand deposits and 5% of time.

- (1) In its own vaults:
  - (a) 6-18 thereof.
- (2) In Reserve Bank for its district:
  - (a) 7-18 thereof.
- (3) Balance, at its option in its own vaults or Reserve Bank.

II. Banks in Reserve Cities.

Amount required: 15% of demand deposits and 5% of time.

- (1) In its own vaults:
  - (a) 6-15 for 3 years.
  - (b) 5-15 thereafter.
- (2) In Reserve Bank:
  - (a) 3-15 for one year, increasing 1-5 for each of 3 succeeding half years.
  - (b) 6-15 thereafter.
- (3) Balance:
  - (a) For first 3 years:
    1. In its own vaults, or
    2. In Reserve Bank, or
    3. In National Banks in reserve or central reserve cities.
  - (b) After 3 years:
    1. In its own vaults, or
    2. In Reserve Bank, or
    3. In both.

III. Banks not in a Reserve or Central Reserve City.

Amount required: 12% of demand deposits and 5% of time.

- (1) In its own vaults:
  - (a) 5-12 for 3 years.
  - (b) 4-12 thereafter.

(2) In Reserve Bank:
  (a) 2-12 for one year then increasing 1-12 for each of 3 succeeding half years.
  (b) 5-12 thereafter.

(3) Balance:
  (a) For first 3 years:
    1. In its own vaults, or
    2. In Reserve Bank, or
    3. In National Banks in reserve or central reserve cities.
  (b) After 3 years:
    1. In its own vaults, or
    2. In Reserve Bank, or
    3. In both.

Effect of Federal Reserve Act

To sum up this whole matter, it will be seen that the effect of the Federal Reserve Act upon the reserves of the country, when the system has been fully worked out, will be merely that of (1) reducing the percentage of required reserve; (2) rendering this reserve really liquid by requiring that it be either cash in vault or funds with the federal reserve bank, the latter to be either cash or investments in short-term commercial paper; and (3) eliminating the permission to count balances with other commercial banks as reserve.

There has been a great deal of misunderstanding and misapprehension regarding the operation of these provisions. It is believed in some quarters that the provisions of the Act prevent banks from keeping balances with other banks or prevent them from obtaining their usual interest on deposits with such banks, or in some way interfering with their operations. Nothing of the kind appears in the Federal Reserve Act or can be inferred from it. The Act merely repeals the older pro-

visions of law which allow balances carried with other banks to count as reserve. There is no reason whatever why any bank which wishes to do so should not carry any balance it chooses with another bank at any rate of interest it can obtain.

Others have asserted that, while the requirements of the Federal Reserve Act are not open to any direct criticism for the reason just stated, they are in effect a hardship upon the member banks because they result in imposing upon them an additional reserve requirement, the apparent reduction in reserves not being real, because in practice (to take care of their necessary exchange and collection operations) the member banks are obliged to go on keeping funds in New York ~~and oth~~er cities. There would be force in this statement if there were not, as will shortly be shown, provision in the Federal Reserve Act for carrying on the collection and exchange business of the member banks through the Federal Reserve Bank. Since, however, that has been fully provided for, the necessity of keeping balances with commercial banks in other cities is eliminated and there is no reason why a member bank should not, if it chooses to do so, dispense with practically all collection and exchange accounts kept elsewhere, merely retaining its account with its own federal reserve bank and expecting that bank to perform all necessary transactions for it. Until the state banks enter the federal reserve system or provision is made for collecting items drawn on them through federal reserve banks, there may be some basis for the statement that the maintenance of certain accounts with other banks for collection purposes is necessary. This, however, will probably disappear rapidly as time goes on.

The effect of the reserve provisions of the Federal Reserve Act upon the profits and the prosperity of the

member banks deserves careful consideration. As is well known, an important item in the cost of operating a bank is the necessity of keeping a satisfactory reserve on hand and the impossibility of realizing anything from the amount of money thus "tied up." For example, if a bank finds from experience that it must always have on hand $100,000 in its vaults, that means that it loses at 5% interest, $5,000 a year, or that $5,000 a year is the expense to it of maintaining its reserve. The effect of the reserve requirements of the Federal Reserve Act upon this aspect of banking expense is, therefore, important.

Let us take the case of the country bank under the older conditions. Such a bank may be supposed to have had outstanding $100,000 of demand deposit accounts. Against this it had to hold 15% reserve or $15,000. Of this $15,000, three-fifths or $9,000 might be carried as a "balance" with a bank in some reserve city. The reserve city bank would usually allow 2% interest on this balance, or, in this case, $180 per annum. Under the new system the bank has to hold a reserve of 12%, or $12,000 instead of $15,000. This 12% is all cash or balance with federal reserve banks and is non-interest bearing. The bank would, therefore, lose the $180 interest which it earned on its reserve balance under the old system. On the other hand, there would be set free for other uses $3,000 (the difference between $15,000 and $12,000). If the prevailing rate of interest in the community were 6%, this $3,000 would yield $180, leaving the bank exactly where it was before as to income, or if the $3,000 were used as a reserve to sustain outstanding deposit to credits or loans, it would sustain presumably one-fourth as much as the $12,000 held as a reserve against $100,000 of deposit accounts. This would mean that deposit loans

to the extent of $25,000 could be added to those already outstanding, provided the bank could find borrowers. If it did find them its income would be 6% on $25,000, or $1,500, so that it would be a very large gainer by the change.

Restoring the Reserve

The problem of the average banker in ordinary times, so far as reserves are concerned, is merely to provide for keeping his reserve up to at least the amount required by law and in some cases at a much higher level, which he has found from experience to be desirable. The Federal Reserve Act makes provision for enabling him to do this.

Suppose a banker should find his reserve running down. No banker can ever keep a reserve so large as to resist the combined drafts of depositors if they become alarmed and insist on payment. When the reserve drops below the danger mark, the banker must seriously consider how to get back again to safety. He has two courses open to him. One of these is to sell some of his assets to other banks. In ordinary times this is not difficult and is effected by the process of rediscounting at federal reserve banks or elsewhere already described, or perhaps by the outright sale of bonds or stocks which the banker may have on hand. In either case the banker gets the right to draw on some other bank or on his reserve bank, and he liquidates immediate demands for cash with the credit thus obtained or with cash which he obtains by means of such credit. Another way for him to proceed is by ceasing to discount or lend. If he does that, with the lapse of days there comes in to him the proceeds of maturing loans. These proceeds may be paid in cash or in claims on other banks. In either case, he gets the means out of

which he is able to raise his cash reserve to such a point that he is enabled to go ahead with additional loans or the buying of new paper offered to him.

The process of turning away business in this way requires some self-denial and is likely to involve the giving of offense to some customers who cannot understand why they should not be allowed credit as usual. In order to avoid the necessity of absolutely refusing loans to customers, the banker may adopt an alternative expedient intended to discourage them from insisting upon getting credit. This is the raising of his rate of discount.

Rate of Discount

The rate of interest or discount charged by the bank is influenced by a number of factors, but essentially depends upon the same conditions that determine any other rate of interest in a community. Fundamental among these is the question—what return can be obtained by the use of capital in business? If capital can be made to yield 20 per cent annually in legitimate business, and if loanable funds are scarce, there is no reason why the rate of interest should not be raised to some point that will equitably divide the 20 per cent between the borrower or business man who applies or invests the capital and the banker who supplies or furnishes it. Of course if loanable capital is abundant and its owners do not care directly to invest it in business, this point will be lower than otherwise, while, conversely, if the community is made up of active business men each of whom uses his funds freely in his own business, the rate of interest may rise to a point very near the average level of business profit.

Supposing, however, that such an average level has

been established in any community, there will nevertheless be a decided difference in rates of interest charged by the banker to different borrowers. The man who presents security that is not of first-class type will have to pay a higher rate than the man whose security is absolutely "gilt-edged." In the same way, the bank may make a higher charge for demand loans than for time loans, etc., the rate being varied to suit the given conditions.

Now, in addition to these factors controlling the rate of interest, the banker may arbitrarily increase his rate whenever he finds that his reserve is running near the danger mark. In every community there are numbers of borrowers whose necessity for loanable funds differs a good deal in intensity. Some of these borrowers are just upon the line of doubt as to whether it is worth their while to borrow or not. A man may see a chance for a business transaction in which he can make, say, 8 per cent. If he has to pay 8 per cent for the capital engaged in the transaction, there will be no reason for undertaking it. The competent banker in close touch with the business situation in his community has a fair idea where this level of profit with reference to the transactions of that community is located. He can then adjust his rate of interest or discount in such a way as to exclude a good many borrowers who will not want their accommodation when they are informed that they must pay a substantial price in order to secure it. Or the banker may raise his rate for granting a certain specified kind of accommodation; e. g., a loan on collateral security of a given type —and by so doing he may succeed in shutting out a good many would-be borrowers who want him to take collateral, when he thinks that this kind of borrowing is being overdone.

Relieving Hard-pressed Banks

Having thus considered the way in which the individual bank manages its affairs when reserves shrink, and the means by which it restores them either through rediscounts or through changes in the rate of discount, we may now give special attention to the working of these principles in the federal reserve system, which is intended to assist and relieve its member banks in case of necessity. The essential and primary purpose of the system is that of performing the operation of rediscount.

Discount, as already seen, is the transaction in which a bank accepts from a customer an obligation running for a specified length of time, and advances to this customer the amount of the obligation, minus the interest for the period for which the funds are advanced. This preliminary deduction of interest is termed discount and the note has been discounted when it is left with the bank by one who wishes to obtain the immediate use of funds. When a bank possessed of such notes, and itself desiring funds, presents these notes to another bank in order to get an advance, the operation is called a rediscount. The notes in that case are rediscounted by the bank which presents them, and they are discounted by the bank which takes them and advances funds in exchange. This process of rediscount is usually accompanied by that of indorsement. That is to say, the bank which presents the note for rediscount indorses it, thereby guaranteeing that it will be paid at maturity.

discount & re-discount

In Europe, generally, the process of rediscounting is a common one and banks resort to it as a customary incident in their operations. In the United States there has long been a prejudice against rediscounting, it being felt that the situation in which a bank is obliged to resort to

another in this way is not one which reflects credit upon it. It has been frequently the custom, therefore, for a bank needing funds to borrow them upon its own direct obligation, or that of members of its board of directors, and secure such obligation by the deposit of collateral. Thus, for example, if a bank in Utica, New York, desired to borrow of a New York City bank, it might do so by simply giving its own note for the amount, or its directors might obtain loans at the New York City bank, with the understanding that such loans were for the use of the Utica institution.

The Federal Reserve Act is intended to make rediscounting a natural, customary, and safe method of liquidating paper and equalizing the stock of reserve money of the community among the different banks. The primary function open to the federal reserve banks, as already stated, is that of rediscount, but they are limited in the performance of this function to their own members. They are, in other words, authorized to rediscount the paper of their member banks, thereby enabling the various members to obtain reserve credits in place of the obligations of their customers whenever they desire.

It should be noted that the effect of this process is quite different from that of extending a "line" of credit in the way already described as being customary among the banks of the United States. Where such a general line of credit is established, there is no definite date of maturity for the loans. The bank extending it may have taken the precaution to grant the credit with a definite maturity, and may demand payment at such maturity. This, however, does not necessarily mean that the bank thus called upon to pay has any automatic means of providing itself with resources. In the case where the bank which needs funds rediscounts a piece of commercial

paper, it entirely parts with that paper, and the payment of the obligation when due falls upon the person who originally made the paper. The discounting bank has merely guaranteed that there will be no default. If the maker of the paper is practically certain to be in possession of funds at the maturity of the paper, liquidation at the time named is assured.

The question then, in carrying on a system of rediscount, is that of making certain that the paper thus presented is of a kind that will liquidate itself. Consequently, the Federal Reserve Act provides that only such paper shall be eligible for rediscount as grows out of commercial, agricultural, or industrial transactions, and the regulations of the Federal Reserve Board have interpreted this to mean that the only paper eligible for rediscount is that which grows out of an actual, live transaction involving a sale of goods in commerce, industry, or agriculture. Assuming this definition to be actually lived up to, the necessary consequence is that the paper is certain to be liquidated at maturity, if the maker himself is solvent. In other words, the great mass of such rediscounted paper is as liquid as the general business of the community itself. If the community has suffered some general disaster, there may be a condition of suspension of payments, in which case no paper would be liquid. If this is not the case, then it may be assumed that the function of the federal reserve bank has been merely to take from banks which had extended their credit too far and which needed funds, a certain part of the commercial paper they had discounted and to give them the funds in exchange.

F. R. Banks Only re-discount

Protection of Rediscounts

It is worth while to note how the federal reserve bank is affected in this type of transaction. In the first place, a member bank has made loans to customers and has presumably employed all the usual safeguards that are resorted to in such cases to make sure that the loan is good. The federal reserve bank has, in addition to this general investigation made by the member bank, the member bank's own indorsement of warranty that the note is good. In addition, as elsewhere seen, the federal reserve bank has on deposit a certain amount of reserve funds belonging to the member bank, while it has, of course, the capital stock contribution made by the member bank in order to become a member. There is thus a triple additional protection against loss over and above what the ordinary or member bank has—namely, the member bank's own indorsement, the reserve, and the capital contribution of the member bank, which may be regarded as a kind of insurance margin in the event of failure, inasmuch as the reserve bank is not obliged to return to a member bank anything except the balance, whatever that may be, due it after all liabilities have been liquidated.

Precisely because the protection to the federal reserve bank is thus so much greater than to the member bank, it is possible for the federal reserve bank to make its rate low. All interest rates are essentially composed of three elements (1) the "pure" interest on money or about what is necessary to pay in order to induce a man who possesses capital to forego the use of it for a time, although assured that it will be returned at a specified date, (2) the provision for expense involved in the mechanism of making loans, and (3) the item of insurance

against risk. It is probable that in most loans currently made the last is far greater than any other. The federal reserve bank, therefore, by reducing it to its lowest terms, makes a corresponding cut in the rate.

Since the federal reserve banks were organized, they have been able to make rates as low as 4 per cent per annum, where paper matured within a period not exceeding ninety days. Sixty-day and ninety-day paper have usually borne higher rates of interest than thirty-day paper and the question may be asked why there should be this discrimination if the security is practically as good in the one case as in the other. The answer is that the security cannot be called so good in the case of the longer maturities as in that of the shorter date. The real reason for making a lower rate for thirty-day paper is that the shorter the period for which notes run, the less the probability that the funds obtained will be used for the purpose of financing a transaction which may become non-liquid. As has already been seen, the less the degree of liquidity, the less is the probability that paper will be paid at maturity. The lack of ability to liquidate does not necessarily mean inability to make ultimate payment, but it does mean temporary postponement.

Making Rates Effective

While the Federal Reserve Act was based upon the theory that the fundamental function of federal reserve banks was to discount paper for their member banks, and thereby to enable these institutions to liquidate, the Act also made provision for what are called "open market operations." These operations were of several kinds. The banks were permitted to deal in the securities of the United States Government to any extent they saw fit. They were also authorized to purchase and sell short-

term obligations of states and municipalities running not more than six months. Bankers' acceptances might be bought in the open market, and finally provision was made for the open market purchase of bills of exchange. It is thus seen that if federal reserve banks were authorized to exercise all the provisions of the Act, and chose to do so, they would have a very wide field of activity apart from member banks. Not only could they deal in long-term bonds and short-term warrants of municipalities and states, but they might invest in live commercial paper of designated varieties.

At first sight it may seem as if the extension of these powers was at variance with the idea that the resources of the reserve banks were intended solely for the benefit of the member banks, through the liquidation of paper in which their funds might have been invested. There are two reasons why this view is not sound. In the first place, it may frequently happen that member banks are not in need of discounts, while non-member banks would gladly get funds. The member banks may, for reasons of their own, not be presenting paper to federal reserve banks for discount, while federal reserve banks may be largely supplied with resources. In such a case as this, the open market power gives the federal reserve bank the ability to relieve a non-member bank directly should there be good reason for so doing, and at the same time, has the opportunity of keeping its own funds invested to some extent, thereby earning a revenue for itself at times when its resources would otherwise be idle.

The second reason referred to above is, however, more important. It is that the federal reserve bank owes an obligation not only to its member banks as individual institutions, but also to its member banks as a group or community of institutions. This duty is that of prevent-

ing undue fluctuations in rates of interest and maintaining, so far as possible, a reasonable, stable, and even rate. There may easily be times when such a result cannot be obtained simply through rediscount operations. In order to make a rediscount rate effective in the market, i. e., to influence the commercial rate of interest and to insure that that rate or something approximating it shall be the prevailing rate in the market, it may be necessary at times for a federal reserve bank, or any other institution exercising the same powers, to become an active factor in the open market and to buy and sell at the rate which it has itself established.

Clearly, if this function were not thus to be exercised, the making of the rate of discount effective would be entirely dependent upon the extent to which member banks chose to obtain rediscounts from federal reserve banks. With the power on the part of federal reserve banks to go into the open market, the control of the prevailing interest rate is always in the hands of the federal reserve banks if they have a substantial amount of loan funds at their disposal. If they do not choose to employ these loan funds in open market operations, it is because they do not consider that the facts in the case warrant them in doing so.

Discount v. Purchase

One other point needs to be particularly observed in studying the functions of federal reserve banks and in differentiating clearly between them. It will have been noted that when funds were advanced to a member bank, such action was spoken of as a discount or rediscount, while in the open market operations the placing of funds was spoken of as a purchase of paper. The question is often asked, how a purchase of paper differs from a dis-

count. When a discount is made, it is understood that the person or institution obtaining the funds leaves them on deposit with the bank which extends the credit, i. e., uses them simply to draw upon and does not demand payment in actual money. If he needs currency he takes it in the notes of the bank which extends him the loan. Where a purchase is made it is expected to be paid for in actual money, thereby reducing the reserves of the bank which makes the purchase, in a corresponding degree. The effect in the latter case is to limit the lending power of the institution which advances the funds, and a purchase consequently operates to restrict the aggregate power of the bank in a much greater degree than does a discount, in which the funds are left on deposit and are simply transferred by check.

The question is frequently asked whether the public obtains any benefit from the rediscount and purchase operations of federal reserve banks, in view of the fact that it cannot discount with reserve banks, cannot keep its own resources with them, and probably only in a minority of cases can expect to deal with the reserve banks through open market operations. The answer to this question is simply that whatever lowers the rate of interest to banks in general in a country where banking competition exists, helps the borrower at banks in a like degree. Any five persons of good standing, who have twenty-five thousand dollars capital, can charter a national bank, and this insures tolerably keen competition between banks. The benefits of the reduced rate of rediscount to such banks are more or less speedily restricted to customers of the banks. Furthermore, as already seen, the object of the federal reserve bank is to make a reasonable and stable rate of interest, and this, if secured, is of decidedly more importance to the busi-

ness and commercial interests of the United States than is the mere lowering of rates of interest.

Protecting the Notes

In what has been said about the reserve, the raising of the rate of discount, the provisions of the National Bank and Federal Reserve Acts as to reserve and the like, constant use has been made of the word "deposits" for the purpose of indicating the demand liabilities. It may have seemed from this as if the bank notes issued by the institution were to be excluded from consideration. Such is not the case, for the bank notes are a demand liability, and in some cases are likely to come in quite as actively for cashing as do the deposit credits. Unless the notes are protected by some special method, therefore, a reserve is needed behind the notes just as much as behind the deposit liability, and in some cases it may be even more necessary.

In some of the large banks of Europe, extraordinarily high reserves of cash are carried behind the note liabilities. This is because the notes are elastic and come in for frequent liquidation, and inasmuch as they constitute an important element in the currency system it is of fundamental importance to have them instantly redeemable in any amount that is likely to be desired.

In the United States, under the National Bank Act, the notes of national banks are especially protected by United States bonds and by a 5 per cent redemption fund which is held by the Treasury of the United States, while federal reserve notes are protected by specially segregated commercial paper and a large specified gold reserve in place of the government bonds required as security under the National Bank Act. The framers of the National Banking Act, believing the bond deposits with

the government to be an adequate safeguard for the national bank notes, devoted most of their safeguards, provisions regarding reserves and the like, to the deposit liabilities of the banks.

But it should be carefully borne in mind that, where a bank has the choice of making its loans either through deposit credits or through note issues, the issue of the notes affects the reserve in the same way as does the creation of deposit credits and that exactly the same precautions are requisite. The issue of notes, then, should stop, just as should the granting of deposit credits, whenever the reserve reaches the danger mark. It is unsafe for a banker to rely upon the continued circulation of his notes even where the issue is inelastic and where therefore the notes are sluggish in being presented for redemption. Since the note liabilities are widely diffused, being usually in the hands of a great many persons, it may easily happen under certain conditions that these notes will come in even more rapidly (if general confidence in a bank has been assailed) than will checks against deposits which may be in the hands of men who are more or less familiar with the bank's condition and who have entire confidence in it.

"Guaranteeing" Liabilities

It has been explained how the banks of the national system are made, in a sense, jointly responsible for the redemption of one another's notes through the requirement that they accept such notes on deposit. It has also been pointed out how the Canadian banks contribute to a joint guaranty fund which is used for the purpose of redeeming the notes of any banks that may fail, the fund being recouped from the assets of the insolvent bank, if possible. The success of such systems in regard to notes

has led to a demand that the banks be compelled to guarantee the goodness of their deposit credits—that is to say, be compelled jointly to establish a fund out of which shall be paid the claims of depositors, if any, who are unable to collect cash from a bank which has suspended or failed.

Such a scheme, under the title "Guarantee of bank deposits" has been a feature of political party platforms in the past. It has been supported on the ground that an examination of the history of bank failures under the national law in the United States shows that a very small contribution made by each bank in the form of a percentage on its outstanding deposits would suffice to create a fund which would be amply sufficient to pay all losses that might be incurred by depositors in insolvent banks. It has been suggested that the establishment of such a fund would render the banking business perfectly secure and would operate as an insurance which would so reassure depositors that "runs" on banks would become unknown, while in the event of a bank failure depositors would be promptly and adequately cared for.

There are several objections to this plan which may be briefly indicated here. The plan would undoubtedly make depositors indifferent about the institution they selected to do their business. This would place a premium on bad banking, and would promote the growth of weak institutions, thereby increasing the number of ultimate failures and the losses falling on the guarantee fund. More important than this is the fact that what the depositor wants most of all is immediate payment of cash rather than assurance of the ultimate safety of his deposits, and that payment in cash is exactly what no such fund could guarantee since in the event of a general bank suspension (such as has occurred from time to time), the

fund would not be able to meet all the demands presented against the banks. It would therefore be no better than the security afforded by the banks themselves.

TEST QUESTIONS

1. What factors are taken into consideration in determining upon the amount of capital for a bank?
2. What is the purpose of a bank's surplus? How is it created?
3. What are the provisions of the National Bank Act concerning surplus?
4. What is meant by undivided profits? How does the account arise?
5. What is meant by the reserves of a bank?
6. What factors determine the amount of reserves that should be carried by a given bank?
7. What three classes of reserve cities were created by the National Bank Act?
8. What was the chief weakness in the reserve system created by that Act?
9. What changes were made by the Federal Reserve Act in the reserve requirements of national banks?
10. What practical methods are employed by bankers for restoring depleted reserves?
11. How does the Federal Reserve system aid in relieving hard-pressed banks?
12. How does a rediscount differ from a purchase of commercial paper?
13. In what ways does the public benefit directly from the discount privilege of banks?

CHAPTER XII

THE BANK STATEMENT

A bank statement is a condensed report of the solvency facts of a bank. It gives on the one side a summary of the resources, and on the other a summary of the liabilities. As a rule, these reports are not only made at stated intervals to the Board of Directors and stockholders of a bank, but also published, either voluntarily or under statutory provisions, for the benefit of the banking public. Many banks, furthermore, make it a practice to mail a copy of such statements to their customers and friends. An understanding of the several items that appear in such a statement will not only make such reports intelligible to the reader and user of banking services, but afford also a clearer understanding of the operations of a bank.

The true character of the bank statement may be grasped most easily if we trace the several items that enter into such a report from their beginning and follow them through all the operations of banking. A simple illustration will be used. Imagine a bank chartered, its officers elected, its employees chosen, and the institution practically ready to do business with its capital in hand in cash. The first thing necessary before opening for actual transactions is the purchase of a suitable banking house, with vault, fixtures, etc. This involves a considerable expense and must be paid for at once out of the capital.

Supposing that such a bank has a capital of $100,000 paid up in gold coin or gold certificates, supposing further that as a preliminary to doing business it has invested $5,000 in a banking establishment, what will be the condition of this institution upon the morning when its doors are first thrown open? Its assets will consist of two distinct elements—the coin on hand and the banking establishment. Its liabilities will consist of the debt it owes to its stockholders who have contributed the capital with which to start. Capital is always a liability since it constitutes a sum which must be paid back to the stockholders, in whole and with a profit if the bank is successful, in part if the bank is unsuccessful and loses. At the beginning of business, then, the bank of our hypothesis will present the following appearance, if a statement of resources and liabilities be made up:

Resources		Liabilities	
Gold	$ 95,000	Capital	$100,000
Banking establishment	5,000		
Total	$100,000	Total	$100,000

The bank is now ready to begin actual dealings with the public. Suppose that depositors come in, with gold or its equivalent in their possession, and leave such gold to the extent of $10,000 with the bank. This will increase its gold or specie by $10,000 but it will also owe $10,000 to depositors. Its statement will then stand as follows:

Resources		Liabilities	
Gold	$105,000	Capital	$100,000
Banking establishment	5,000	Deposits	10,000
Total	$110,000	Total	$110,000

Suppose now that five persons, one after another, apply for loans to an aggregate of $5,000 while five others

present, for discounting, notes of outsiders with whom they have had dealings to the amount of $5,000 additional. Suppose that these loans are approved by the bank. The question then arises: In what form will the loans be made? As seen at a former point, they must be made either by the actual payment of coin or currency, by the granting of a deposit credit, or by the issue of bank notes. It has also been seen that in practice the latter two are the ways in which loans are made. We may suppose therefore that the first five customers took their loans in bank notes and that the second five took them in deposit credits. The statement of the bank's condition will then look like this:

RESOURCES		LIABILITIES	
Gold	$105,000	Capital	$100,000
Banking establishment	5,000	Deposits	15,000
Loans and discounts	10,000	Notes	5,000
Total	$120,000	Total	$120,000

It may be supposed, however, that the holders of the notes pay them out immediately to others and that these others for reasons of their own desire in some cases to get the coin. Suppose that $2,000 of the notes are presented for cashing. It may also be assumed that the depositors will transfer their funds, in part at least, to others by means of checks, and that these checks will be deposited with other banks and will be presented by them for cashing. Suppose that the amount of checks thus presented is $3,000, then the statement of the bank will present the following appearance:

RESOURCES		LIABILITIES	
Gold	$100,000	Capital	$100,000
Banking establishment	5,000	Deposits	12,000
Loans and discounts	10,000	Notes	3,000
Total	$115,000	Total	$115,000

This process may go on indefinitely, with deposits in coin or currency, and loans made by granting deposit credits or by issuing notes.

At the end of the year the bank may find that as a result of its operations it has coming to it, say, $10,000 in interest. How will this amount appear on its books? The directors of the institution may decide to declare a dividend of 2 per cent on the capital stock which will require $2,000, to maintain $5,000 as a permanent addition to their capital which is ordinarily termed a "surplus," and to carry the balance as "undivided profits." Supposing, for the sake of convenience, that the interest ($10,000) due the bank has been handed to it in coin, the statement would then look like this:

Resources		Liabilities	
Gold	$110,000	Capital	$100,000
Banking establishment	5,000	Deposits	12,000
Loans and discounts	10,000	Notes	3,000
		Surplus	5,000
		Undivided profits	3,000
		Dividend	2,000
Total	$125,000	Total	$125,000

Immediately upon being notified of the declaration of a dividend, the stockholders would either draw out the dividend in cash or else have it credited to their accounts. Perhaps it might be credited to start with, without going through the intermediate operation already traced, but the result would be the same in either case. If the dividend were transferred to the individual depositors' accounts, this would increase the item of "deposits" and would wipe out the dividend item.

The bank would also find that it had some expenses to pay. If we assume for the sake of convenience that its expenses were not paid until the end of the year instead

of being paid monthly, it will simplify matters. Suppose that for the year its total expenses are $2,000, how should these appear in the statement? Evidently, if they are paid out in cash, they will reduce the cash resources of the institution. But the bank will have to make a showing to its stockholders that would indicate where the money has gone. Now, if we suppose that one-half of the stockholders draw out their share ($1,000) of the dividend declared, while the other one-half have the dividend transferred to their individual accounts, and if we suppose that the bank disburses $2,500 in cash to pay its expenses, the situation will look like this:

Resources		Liabilities	
Gold	$106,500	Capital	$100,000
Banking establishment	5,000	Deposits	13,000
Loans and expenses	10,000	Notes	3,000
Expenses	2,500	Surplus	5,000
		Undivided profits	3,000
Total	$124,000	Total	$124,000

It may be that the bank feels that it is unwise to keep so large a quantity of gold on hand and consequently determines to put $50,000 in gold into the purchase of bonds. It may not be possible to get these bonds at a premium and so it decides to buy $40,000 par value of bonds at 125 which makes an outlay of $50,000 in cash. This will make the following change in its statement:

Resources		Liabilities	
Gold	$ 56,500	Capital	$100,000
Banking establishment	5,000	Deposits	13,000
Loans and discounts	10,000	Notes	3,000
Expenses	2,500	Surplus	5,000
Bonds	40,000	Undivided profits	3,000
Premiums on bonds	10,000		
Total	$124,000	Total	$124,000

The foregoing statement shows most of the primary operations of banking. The essential nature of the different items has been explained. The relative size of the items will vary with the business transacted. In fact, the items of "Discount and Loans" and "Deposits" in the foregoing statement are disproportionately small for a going banking concern. We have recorded only the first simple transactions. In actual practice these two items involve the largest single sum in the resources and liabilities of a bank statement.

Bank statements are not yet standardized as to classification of items, number of items, or their form of statement, though all bank statements tend to conform to a uniform type. From the very nature of banking operations no stereotyped form of statement can be used because the functions and operations of banks differ—notably so with the four classes of banks known as savings banks, trust companies, state banks, and national banks. Banking laws vary as to the items to be included in such a statement and as to how each item is to be stated or subdivided.

A most common and essential item may be indicated in a few actual classifications of resources and liabilities.

A certain state bank makes the following very condensed report:

Resources		Liabilities	
Loans and discounts	$1,150,493.04	Capital stock	$ 200,000.00
Overdrafts	110.70	Surplus	50,000.00
Stocks and bonds	111,316.74	Undivided profits	23,008.03
Building	69,374.15	Reserved for taxes and interest	3,247.71
Cash and sight exchange	341,615.30	Deposits	1,396,654.19
Total	$1,672,909.93	Total	$1,672,909.93

The report of one of our largest national banks follows herewith:

RESOURCES	
Loans and discounts	$123,581,233.89
Overdrafts	3,689.58
U. S. bonds to secure circulation	8,640,000.00
U. S. bonds to secure deposits	250,000.00
Other stocks, bonds and mortgages	15,719,128.41
Real estate, furniture and fixtures	13,847.00
Premiums paid	63,062.50
Due from other national banks	18,138,682.35
Due from state banks and bankers	5,862,007.47
Exchange for clearing house	5,709,024.08
Bills of other banks	450,560.00
Cash items, nickels, etc.	140,970.87
Specie	20,298,507.10
Legal tender notes	15,357,940.00
Redemption fund	432,000.00
Due from U. S. treasurer	640,000.00
Total	$215,300,653.25

LIABILITIES	
Capital stock paid in	$ 21,500,000.00
Surplus fund	8,500,000.00
Undivided profits	1,594,958.31
National bank notes outstanding	8,550,100.00
Individual deposits subject to check	74,087,245.87
Demand certificates of deposit	1,165,603.22
Certified checks	783,010.48
Cashier's check outstanding	776,776.21
Due to other national banks	60,259,316.25
Due to state banks and bankers	37,248,655.29
Dividends unpaid	1,134.00
United States deposits	408,853.62
Reserve for taxes	425,000.00
Total	$215,300,653.25

This report also conforms in general with our former illustration. Some of the special items here listed are such as arise out of the peculiar relations of national banks to the federal government and from the note-issue

functions of these banks. The discussions of these questions contained in this book should make clear the reason for the existence of these items in the bank report.

The item of overdrafts we have not yet considered. It arises when a customer overdraws his account, something which is frequent in business operations, but which should be discouraged by every banker. It is simply an additional courtesy or credit accommodation which the bank may grant or refuse a depositor. Such overdrafts may be secured or unsecured. They may sometimes be considered an asset equally as sound as loans, if selected with the same care.

It will be apparent at once that from a solvency standpoint two banks with identical reports may be utterly dissimilar in solvency. A good showing on a balance sheet may be made by a bank the very day before it is compelled to close its doors. These discrepancies in bank reports must be looked for in the individual items, and by far the most important item is that of Loans and Discounts. These often contain far less actual assets than the figures call for. It is the purpose and function of a good system of bank inspection to examine behind the figures so as to make certain that a bank balance sheet represents banking facts rather than fiction.

TEST QUESTIONS

1. What is meant by a bank statement?
2. Why is capital considered a liability?
3. Why are surplus and undivided profits listed as liabilities?
4. Why are expenses listed as a resource?
5. Of what is the loans and discount item composed? the deposits item?
6. What are the two largest items in a bank statement?
7. Why is a bank statement not necessarily a safe index to the solvency of a bank?

CHAPTER XIII

GOVERNMENT AND BANKING

What has been said of the nature of banking thus far shows that the bank stands in a peculiar position with reference to general business. Its responsibilities are extensive and heavy and a misstep or blunder at any point inevitably results in a widely reflected suffering on the part of the business community. This has been gradually recognized by the governments of the world and, practically everywhere, they have assumed a certain amount of control of the banking business.

This control varies greatly in intensity, partly in accordance with the exact functions performed by the bank and the extent to which they are public in their nature, but partly according to the general idea entertained by the people of a given nation with respect to the proper relationship between the government and the individual business men. It has been recognized also that a different degree of control, or at all events a different method of applying such control, is to be employed according to the particular group or class to which a given banking institution belongs. This makes the system of government oversight in vogue in the various countries, or even in any one country, exceedingly complex, and renders it highly desirable to note the general principles upon which government control is applied before proceeding to a detailed study of legal requirements.

Principles of Control

In the abstract it is not hard to state the general principles of control. The government seeks first of all to assure absolute soundness and solvency in banking. It wants to protect the stockholder and the creditor to such an extent that they may feel perfectly sure of the safety of their claims against the bank. Besides this, it endeavors to assure the liquidity or redeemability on sight of every demand obligation against the bank. It is hard to say which of these demands is the more fundamental. Both represent requirements that are absolutely indispensable and which it is the object of every government that undertakes the supervision of banking to maintain.

In seeking to attain these ends, governments follow three general lines of action. In the first place, they usually specify the kinds and classes of loans in which banks may engage and the character of the security that shall be accepted for such loans. In the second place, they endeavor to enforce certain requirements regarding the amount of coin on hand and the protection of the liabilities that are payable at sight. Thirdly, they seek to hold bankers up to a high standard of work and at the same time to make sure that the institutions are entirely free from any taint of dishonesty, by regular inspection and examination carried on through the agency of government overseers or examiners. They also require regular reports from the banks certifying to their condition. Where a bank is vested with a monopoly privilege of some kind or exercises in some peculiar way a public or quasi-public function, the government may go so far as to insist that it shall be represented on the board of directors and shall thus have a voice in the active man-

agement of the concern. This is the case in most of the great European banks. as well

Regulating Loans

The most fundamental type of regulation in which a government can engage is the effort to exercise control over the loans and operations of the bank. This is an extremely difficult thing to do with success, but there are certain lines along which it can properly and beneficially be attempted. Under the National Bank Act, three classes of regulations applying to loans may be noted: (1) The National Bank Act prohibits certain classes of loans absolutely; (2) It limits the amount of certain classes of loans and the persons to whom they may be made; (3) It attempts within limits to control the kind of security upon which business may be done.

These limitations are not always lived up to, but the mere imposing of them is a beneficial thing, and the government is constantly seeking to bring about a better and better recognition and observance of the regulations it has laid down. A good deal of progress has been made in this direction within recent years, and the effect of it has been to brace up other banks organized under state laws and to bring them by the force of competition into a position that will compare favorably with that of the national banks.

Prohibited Loans

National banks are forbidden to make any loan or discount on the security of the shares of its own capital stock, nor may they purchase or hold any such shares unless the operation is necessary to prevent loss upon a debt previously contracted in good faith. In the same way, the bank, except when authorized by the Federal

Reserve Act, is not allowed to make loans upon real estate security and may only hold real estate for its own accommodation, or, in case it has purchased real estate under judgments, etc., or obtained it in satisfaction of debts previously contracted, in which event it shall get rid of the real estate within five years.

There are certain other classes of prohibited loans which grow out of various requirements of the National Bank Act, but enough has been said to indicate the direction that these prohibitions take. It is the object of the law to prevent the acceptance of improper security or security which, although sound, is not liquid—that is to say cannot be realized upon promptly. The importance of regulating loans on real estate has been especially well recognized within recent years, and the requirement of the National Banking Act in this regard has been imitated by other banking laws.

Restriction on Loans

Just as the National Bank Act prohibits certain classes of loans, it endeavors to limit the amount of certain others. Thus the loans made to any single person, company, corporation, or firm, for money borrowed, including in the liabilities of a company or firm the liabilities of the several members thereof, shall at no time exceed one-tenth part of the capital stock and surplus of such association actually paid in, or an amount greater than thirty per cent of the capital in the aggregate. So also the bank is prohibited from being indebted to an amount exceeding its capital, except as a result of the issue of notes, the creation of deposits, the acceptance of bills of exchange, and the liabilities to the stockholders for dividends and reserved profits.

Of course the object of these and other provisions of

the same sort is to prevent the funds of the bank from being tied up with the affairs of any one man or firm too exclusively, and to prevent the bank from inflating its liabilities in a dangerous manner. It is recognized that when a bank's loans are widely distributed throughout a community, the bank is as sound probably as the soundest section of the community, whereas, if it is closely entangled with a few concerns, it has to stand or fall with them.

So also the question of loans to officers and directors must be carefully controlled in order to prevent institutions from advancing their funds and those of others that have been deposited with them to the persons who are in control of the bank at the time. This, however, is a matter which can be best managed through the administrative supervision of the government officer who makes periodical inspections of the bank and gives advice as to the directions along which it should seek to control its business.

Requirements as to Reserve, etc.

Behind the general requirements of the national bank law with reference to the amount of loans and discounts and the persons to whom they may be made, is the list of requirements with respect to the maintenance of the bank in an immediately liquid condition. The most fundamental of these is the provision regarding reserve, already sufficiently discussed. In the same class may be put the provisions regarding the special protection of notes, already outlined. To observe these two classes of restrictions may at times quite rigidly limit the scope of the bank's operations, and may therefore prevent it from engaging in business that it would otherwise be willing to take on.

The effect of this is to lead the bank usually to reject certain classes of business, because, other things equal, the bank desires to keep in the most solvent possible condition, as well as in the most profitable position, and this is practicable only through the limitation of its business to legitimate commercial loans. Thus, where the banking capital of the community is not excessive, the tendency is for the commercial banks of that community to hold themselves down rather rigidly to straight commercial paper operations and thus to keep in a tolerably liquid condition. The danger comes when a bank has been tempted to make large loans upon a given kind of business paper which later becomes hard to realize on, owing to the development of a commercial situation unfavorable to the business upon which this particular kind of paper has been built up. This is a matter that cannot be controlled by law and can be guarded against only in the way just suggested and in other ways of the same kind, all depending upon the maintenance of such requirements as to reserve, classes of paper, etc., as judgment may seem to dictate.

Oversight of Loans

While the internal organization of the typical federal reserve bank is thus in its outline substantially similar to that of the commercial bank, there are certain phases of the work of the reserve banks that differentiate it quite sharply from the work of commercial institutions. In the ordinary bank, a great deal of the hazard or risk resulting from the operations of the institution is due to uncertainty as to the goodness of the loans that are made and doubt as to the character of the paper. The shrewdness and acumen of the ordinary bank president and his immediate aides, is exerted in determining whether given

individuals who want to borrow are "good" and when satisfied that they are "good," in ascertaining whether they will be able to pay at the time they say they will, or whether they will have to be "carried" beyond that date, by extending their loans, in order to enable them to gather their strength and get in the cash needed to pay off the bank.

The federal reserve bank must meet a problem which in this respect is different from that presented to the ordinary bank. It discounts no paper without the indorsement of a member bank, which means that the paper thus offered for rediscount by the federal reserve bank has passed under the scrutiny of the officers of the member bank and is indorsed or guaranteed by them. This means that if the maker of the paper does not pay at maturity, the member bank must make good the shortage. The commercial side of the bank's work is thus considerably simplified. It can delegate to the member bank a large part of the task, passing upon the value of the signatures of the borrowers, the examination of their statements, their business condition, and the like. Only in those cases where a borrower has so large a volume of paper outstanding in the hands of so many different banks as to make the problem of his responsibility greater than can be dealt with by any individual bank or group of banks, does this question of testing his liability become really a problem for the federal reserve bank itself to deal with.

In another way, however, the federal reserve bank has a highly special function which is not performed by the commercial bank. This is the duty of testing the validity of the total volume of bank credit and of ascertaining whether in the aggregate the banks of the community are going too far in extending their loans to their customers.

Such an over-extension may make itself evident in either of two ways—it may be seen in the presentation to the Federal Reserve Board of a great deal of paper originating with the same makers which has found its way into the portfolios of various banks and has by them been offered for rediscount in the ordinary course of business, or it may be seen in the fact that given member banks, although not necessarily becoming burdened with too great a volume of paper coming from an identical source, are obtaining from federal reserve banks accommodations which constitute too large a proportion of their capital, i. e., which involve a contingent liability bearing too great a proportion to such capital. To reach this determination accurately requires a general survey of the banking field, knowledge of the general business conditions to which the various member banks are subject, and broad analysis of the bank credit situation generally. This is the primary "central banking" function—the determination whether, in a given district or country, bank credit as a whole is being too largely extended as compared with the available means for liquidation without an undue amount of renewal.

The commercial bank does not concern itself primarily with questions of this class, but is chiefly interested in its own profits and is disposed to go as far as it feels that it can in making loans, without bringing its own solvency into jeopardy. No doubt there are large and public spirited institutions, more or less international in the scope of their operations, which take a broader view of their relation to the community than this, but it is not unfair to say that the bulk of the banking community hardly feels called upon to look beyond the immediate welfare and solvency of the institutions in which they are immediately interested. The federal reserve bank must,

however, take the broader view since the primary purpose of its organization is that of supplying the elements of co-operation and conservation of resources.

Inspection and Examination

It is probable that, with the large number of banks competing actively for business, it would be practically out of the question to expect a very rigid adherence to the requirements of law if this were left entirely to the banks themselves. Bank managers might, and probably would, recognize the abstract desirability of living up to the requirements of the law, but they would be tempted to get away from it in connection with some particularly alluring operation and thereafter the habit of doing so would in many cases become fixed. Recognizing this, the national banking law has provided for a special corps of examiners who are organized under an officer called the comptroller of the currency whose office is in the Treasury Department at Washington.

Although this officer is called the comptroller of the currency his operations do not relate to the "currency" exclusively but are largely centered upon the supervision of the loan operations of the banks. He has about 100 examiners under his direction and these men are constantly going from bank to bank along specified routes which are mapped out for them in the central office, making a more or less careful examination of the affairs of each institution and then reporting in full to the comptroller at Washington, he being supposed to take up and study the reports which are thus turned in and where necessary to call to the attention of a given bank any particulars in which its methods ought to be improved.

Work of Examiners

The examiner, when he visits a bank, is supposed to examine its books, making sure that they are being correctly kept and that they truly exhibit the conditions in the institution. The examiner looks through the cash in the vaults in order to see that it is as represented and also the securities that are held as investments or as collateral. He pays particular attention to the character and distribution of the loans and notes, looking not only for instances where the provisions of the national act are being violated but for instances where the bank without violating any law is running into what he considers a dangerous position which may imperil its funds. After getting the data for a report, the examiner furnishes the comptroller with a statement of prescribed character covering certain data that are wanted in the case of every bank, and then he makes additional remarks such as have occurred to him in the course of his observations.

Under regulations recently established, the force of bank examiners has been separately organized for each federal reserve district. In each district there is a chief examiner, and it has been customary to hold periodical meetings at which to compare notes and talk over the situation. The chief examiner keeps the comptroller closely advised with reference to the general banking outlook in the district of which he is in charge. The comptroller himself may communicate to the examiners of a given district such information regarding affairs in that district or other districts as he may deem advisable in order to facilitate their inquiries and render them more efficient in the discharge of their duties.

Federal reserve banks are vested with the right to

examine their members and they receive from the comptroller of the currency information regarding the condition of these members which has been gathered for him by national bank examiners.

The federal reserve banks themselves are examined by examiners in the employ of the Federal Reserve Board.

Bank Reports

Besides submitting to examination whenever the comptroller may order it to be made, the national banks are required to turn in five or more reports every year according as the comptroller may demand. These reports are always made for some past date. Thus, the comptroller may on July 1 telegraph to all the banks requesting them to report for the 15th of June preceding. This is done in order to restrain the banks from what is called "window dressing"—that is to say, getting into a temporary position that makes too favorable an impression. The dates are selected at somewhat the same seasons for each year but do not fall on identical days for obvious reasons.

When the bank gets a call from the comptroller it fills out a specified blank on which are shown all the items that are deemed essentially necessary. These include capital, surplus and undivided profits, deposits, notes outstanding, amounts owed to other banks, loans and discounts, stocks and bonds held, amounts due from other banks, specie and currency on hand, and several other items.

When the reports come in, they are carefully tabulated and the aggregate results by cities and states are made public. This furnishes a body of data five times each year for the study of the banking community and

enables careful bankers to see in what direction the community is drifting. They are thus able to shorten their loans or otherwise rearrange their affairs, if they choose, in accordance with the conditions that are pointed out by the general bank statement. Reserve banks report to the Federal Reserve Board each week, and the report is published. It serves the purpose of showing the condition of the nation's ultimate reserve-holding institutions.

Functions of the Comptroller

The comptroller of the currency, upon getting in the bank reports, goes over them either personally or through his subordinate officials with more or less care. He notes the cases where banks have failed to live up to the requirements of law and those in which the banks are acting unwisely. He then sends a letter of criticism or instruction to the bank, noting the points to which he objects and requesting that the institution shall get rid of given kinds of security or call in certain classes of paper or otherwise improve upon its methods. In case a bank proves restive or recalcitrant the comptroller may close its doors and appoint a receiver if he thinks the conditions are such as to warrant this action. But of course such action is taken only as a last step. In certain other cases, he may apply for a forfeiture of a bank's charter, but this is also an extreme remedy which is rarely applied save in case of great necessity.

The appointment of a receiver takes place when the comptroller thinks it necessary in order to protect all parties concerned and results in the institution's passing under the control of the comptroller and his subordinates. A certain number of banks are constantly in the hands of receivers and years may be required to close up their

business. The work of the receiver ends when he has realized on the assets, paid off the creditors, and divided the balance among the stockholders, or when an accommodation has been arrived at between the bank and its creditors so that everyone is satisfied and the institution is "restored to solvency" as the phrase goes; that is to say, enabled to resume business on a basis that complies with the requirements of law and with the ideas of the comptroller of the currency regarding the needs of the situation.

The comptroller, of course, has charge of the issue of bank notes and the redemption and retirement of circulation, working in conjunction with the treasurer of the United States. Every year, he submits a report concerning the condition of the national banking system to the speaker of the House of Representatives, who lays it before Congress.

The Federal Reserve Board likewise reports each year to the Speaker of the House of Representatives. It issues monthly the Federal Reserve Bulletin which shows operations for the preceding month.

Control of State Banking Systems

Many of the states have banking departments or banking commissioners who preside over offices that are organized like that of the comptroller of the currency and stand in somewhat the same relation to the state banks of those states that the comptroller of the currency does to the national banks. Inasmuch as state banks do not now issue circulating notes, the duties of the state bank examiners are confined to looking into the condition of affairs as regards the loans and discounts and other operations of the banks to see whether they comply with the law of that particular state or not.

The fact that politics controls to a greater extent in the appointment of bank examiners and bank commissioners in certain states than under the federal government has prevented some state banking departments from being as efficient as they otherwise would have been. Furthermore, the fact that the banks are organized under different laws would render possible some failures to secure co-operation and consequently some evasions of the law by state and national banks which were not ready to observe the legislative requirements to which they are subjected. For this reason, efforts have lately been made to secure joint or co-operative action on the part of the comptroller and the state banking departments. If this proves to be practicable, the result will be greatly to strengthen the character of the supervision now undertaken. It is also true that the practice of the state banks and trust companies in redepositing their reserves with the national banks gives the latter a very much better control of the situation, and hence renders the Federal system more effective and satisfactory than it would otherwise be. Thus the lack of co-operation between the federal and state governments does not produce results as injurious as might be expected under some conditions.

Direct Governmental Control

At an earlier point in the present chapter, reference has been made to the fact that, in most countries, governments exercise a direct participation in the affairs of the central banking mechanism. In the First and Second United States banks, the great chartered institutions which conducted the fiscal affairs of our government during forty years of its early existence there was actual government ownership of bank stock and in foreign

countries today the government either holds stock in the central bank (as was done by the government of the United States in both the First and Second United States banks), being represented on the board of directors in proportion to the amount of its stock ownership, or it may simply be allowed one or more directors on the board who are members thereof by virtue of a requirement of the bank charter, although they do not represent any actual ownership of the stock. As we have seen, the latter plan is the one adopted for the new federal reserve banks. In such cases, the government has an immediate voice in the management of the affairs of the institution and is able to know everything about the inner working of the concern.

Obviously this type of control is possible and desirable only where the bank is a large central institution which stands in direct relationship to the public treasury and to the currency circulation, and is therefore vested with a kind of public function. In the case of such institutions, frequent and minute reports are made to the board of directors and to the government authorities showing just what the bank is doing, and thus the government is enabled to exercise almost as close a supervision as if it were conducting the business itself.

Control of the Interest Rate

One species of state control of banking which is not attempted in the banking legislation of the United States, but which is seen in some foreign countries, is the limiting of the rate of interest or discount. A good many American states have what are called usury laws, by which it is sought to keep the rate of interest down to a point not exceeding a specified figure known as "the legal rate." These laws have proved impossible of enforcement, and

are rather a hindrance than a help to the establishment of reasonable rates of interest. In specifically limiting the rate of discount at banks, it is sometimes sought in foreign countries not to impose an arbitrary limitation but to take some of the surplus gains through a tax on the excess profits which are thus earned. It is extremely doubtful, however, whether any such regulation is in the interest of the borrower or of the public at large.

The rate of discount is essentially a thing to be determined by the interplay of commercial forces; and, as we have seen at an earlier point, it is a weapon which can be most usefully employed by the bank in protecting its reserve and which should therefore be left as free as possible, subject to no restriction. The successful type of control for the protection of stockholder and borrower depends, as has been seen, upon some one of the other modes of regulation that have already been described.

Government Deposits

One reason why foreign governments protect their banking systems with so much care is that the banks in question are the holders of the public funds of the country. Of course the authorities could not afford to have these funds tied up in an unavailable form even for an instant, and this supplies one powerful inducement toward strict regulation. In the United States, what is called the sub-treasury system or independent treasury system is employed for keeping public funds. Under this system, the funds of the government, instead of being deposited in banks, are supposed to be held in actual coin or currency in the public Treasury at Washington or in some one of the so-called sub-treasuries located at various places throughout the country.

The government, however, has found that in times of

surplus, the actual keeping of the coin or currency in its own vaults tends to deplete the general stock of coin or currency in the country too much, while, on the other hand, greater convenience in business operations—receiving taxes, paying creditors, etc., is attained by the use of banks. For this reason, it has been found necessary to employ certain banks as "government depositories." These have varied in number from a very few up to more than 1,300, the latter figure being reached in 1907. The government unfortunately has not always distributed these deposits to the soundest banks, but has sought to protect itself against possible loss by requiring such banks, before receiving the government funds, to deposit in trust with the Treasury an equal amount in approved bonds. Then when the government funds are withdrawn from a particular bank, an equivalent amount of bonds is released by the Treasury and may be taken back by the bank that deposited them. Thus the depositary banks of the United States are not more carefully inspected or looked after than any other banks. Some secretaries of the Treasury have endeavored to control the banks and induce them to abstain from certain practices by threatening to recall deposits, but this plan has never worked very successfully.

Under the Federal Reserve Act provision has been made for depositing the funds of the government with federal reserve banks. Acting upon the power delegated to him in this respect, the Secretary of the Treasury has designated the reserve banks as fiscal agents of the government.

Government Aid to Banks

Out of the conditions sketched in the last section has grown a system of government aid to banks in the United

States. At times when there is a large surplus in the Treasury or when the banks throughout a given section of the country have become "over-extended"—that is to say have made more loans than they ought to have made, considering their reserves, etc.—the government is sometimes urged to step in and aid them. This it is asked to do by letting out some of the cash it has in the Treasury, thus raising the reserves of the banks and so enabling them to lend more freely.

There is no reason why the government should ever do this in the case of any one bank, but there may be conditions existing over a large area when the state of affairs in the community generally calls for aid of this kind in order to prevent embarrassment and general lack of bank credit. If such a state of affairs does exist, there may be occasions when "relief" of the kind referred to will be desirable or necessary. This, however, is true only because of the artificial shortage of currency which has been caused by the action of the government itself in withdrawing funds and keeping them stored in its own vaults. Under such conditions the placing of the funds in banks is merely a restoration to the channels of trade of some funds which the banks would otherwise have had anyway and which are needed by the community for the purpose of prosecuting its enterprises and getting the loans it required. The trouble is that the government, in placing these funds in banks, necessarily acts in an artificial manner, since it is not able to know just where the funds would, in the natural course of things, have gone. Therefore, its bank deposits are always more or less artificially placed and they are likely to go to those banks that do not need them rather than to the banks which do need them and which would have received them in the natural course of events had not the govern-

ment insisted upon having them paid to it in cash when taxes and other dues were originally liquidated.

The effect may be, when the government undertakes to relieve conditions in this way, that it places the funds in a manner that temporarily hurts rather than helps the situation. In consequence, a period of readjustment is sometimes needed before the desired benefit is receivd from such deposits. So also when the funds are withdrawn from such banks the consequences may be injurious because of the sudden depletion of the reserve. This makes it necessary for the government to exercise a good deal of care both in depositing its funds and withdrawing them, if it wishes to avoid injury to the banking system. When the functions of the federal reserve banks are fully developed and they are completely performing their duties as fiscal agents, such aid will be no longer needed.

TEST QUESTIONS

1. Account for the fact that governmental control of banking operations is a well-established fact in all progressive countries.
2. Name three primary objects of such control.
3. What principles of regulation are used to accomplish each end?
4. What are some of the typical restrictions and regulations placed on loans?
5. Explain how regulation of loans helps to protect reserves.
6. How does the Federal Reserve Act charge the member banks with responsibility on paper offered for rediscount?
7. By what administrative devices are banking laws and regulations enforced?
8. Explain the system of bank inspection which prevails in the national banks and in the federal reserve banks.

9. What are the chief problems in connection with the examination of state banks?

10. What kind of governmental control is exercised over interest rates? What is the purpose of such control?

11. What special problems of control are involved when the government itself is a depositor at a bank?

12. What has been the policy of the United States in regard to deposits at national banks? How has the system been modified under the Federal Reserve Act?

CHAPTER XIV

HISTORY OF BANKING IN THE UNITED STATES

While there is not much use studying banking from the standpoint of ancient history, or in an antiquarian way, it is of considerable importance to understand how existing banking institutions have developed and what is the practice in regard to banking in other countries of the world. It is by such study that the existing banking problem is properly apprehended and that the foundation is laid for a suitable understanding of what should be done in the way of legislation for the improvement of present methods.

The nineteenth century is a period exceedingly rich in banking experience. During that century, an immense number of banking systems were tried, and theory after theory was taken up, applied, and discarded. So also in the matter of practice a great transformation was brought about and banking methods were almost revolutionized. This makes the banking history of the nineteenth century of very great value to the student of the subject from the practical standpoint.

In the United States, a review of banking history will show that many of the numerous schemes and proposals now brought forward from time to time as original, have been tried, worked out, and thrown aside. Here and there a good plan or system has been discarded for inadequate reasons and an outline of past efforts shows why

the changes then introduced were unwise, and why a return to some method then discarded may be beneficial.

First Bank of the United States

When the government of the United States was first organized, it found that banking institutions were almost entirely lacking in this country. Owing to the bad condition of the currency and the disorganization of commercial credit, there was a strong desire that the government should participate actively in restoring business to a condition of greater soundness and particularly that it should aid in establishing a banking system upon a working basis. At that time, the dominant banking idea in European countries was that of large chartered banks standing close to the government. There was such an institution in England, and Alexander Hamilton, who was the conspicuous figure in our government so far as concerned all matters of finance, recommended the establishment of a strong government institution to handle the finances of the government, issue bank notes, and generally act as a conservative and unifying influence in the financial system of the country. Such a bank was chartered and went into operation in 1791. This was the First Bank of the United States. A twenty-year charter was granted to it. This charter followed very much the same lines that had been recommended by Hamilton in his famous report. The details, of course, were shaped in Congress to suit the necessities of the situation but, the main ideas are clearly recognizable.

The bank was given a capital of $10,000,000 divided into 25,000 shares of $400 each. Of this sum $8,000,000 was open to subscription by the public, while the other $2,000,000 was to be subscribed by the United States and paid in ten equal annual installments with interest at

6 per cent. The subscriptions to the stock were to be paid one-fourth in specie and three-fourths in government 6 per cent bonds. Each shareholder was entitled to cast one vote for one share, one vote for the next two shares, etc., up to 30 votes, which was practically the maximum vote that could be cast by any one man. The power to inspect all the affairs of the bank except the accounts of private individuals was given to the head of the Treasury, and he was also authorized to call for reports as often as once a week if he chose. The notes were made receivable for public dues as long as they continued to be payable in gold and silver. The bank was allowed to establish branches wherever the directors thought fit, but only for discount and deposit. No trade of any kind could be engaged in and the bank was not allowed to hold real estate, though it might lend on mortgage security, while it was not permitted to become indebted for a greater amount than its deposits. This practically limited the issue of notes to an amount not in excess of the capital stock. The bank was to transact the fiscal business of the government, and in return it was given an exclusive charter for twenty years.

The capital of the bank was almost instantly subscribed, and the institution promptly went into operation. It proved to be a great success, rendering the currency of the country much more stable, supplying the needed banking accommodation, and providing a note currency which was on the whole quite satisfactory. It was very successful in controlling the state institutions and assuring prompt payment of their obligations, especially of the circulating notes issued by them. In transacting the government's business, making loans as desired, etc., it met the necessities of the situation very satisfactorily.

There was, nevertheless, a considerable opposition to

the bank from the first, and this grew stronger as the time came for the expiration of the charter. The bank stockholders were of course desirous of continuing and as early as 1808 they petitioned for a renewal. Their application was supported by Secretary of the Treasury Gallatin who showed that the government had made a handsome profit on its stock besides earning dividends averaging 8⅜ per cent per annum. The bank was in an exceedingly strong position at this time, as it had on hand about $5,000,000 in specie while its loans and discounts were $15,000,000 and consisted chiefly of short-term paper. The opposition was due to the fact that a large proportion of the shares were owned abroad and that the profits, therefore, went to foreign stockholders, while the antagonism of the state banks, which had been growing in number, was very strong. After a bitter struggle, Congress declined to renew the charter, and the bank went out of existence at the expiration of the original charter in 1811.

Early Growth of State Banking

It was an unfortunate time at which to make a change in the system of banking. The war of 1812 was on the point of breaking out, and the government had reached a stage where it more than ever needed the aid of a strong financial institution. The removal of the First Bank of the United States took away the check that had been imposed upon the small state banks, and the result was that their issues were largely inflated during the years immediately following the cessation of the bank's operations. Added to this was the fact that the government speedily fell into a condition of disordered finance and was obliged to borrow from the state banks and then to sell bonds wherever it could, finally resorting to issues

of so-called "treasury notes" which were really small United States bonds that ultimately degenerated into a kind of currency. Finally conditions became so bad that proposals were put forward for the organization of a new bank of the United States; and, after the failure of several proposals of this sort, Congress succeeded in passing a new charter in 1816.

Second Bank of the United States

The Second Bank of the United States was modeled very closely upon the plan which had worked so successfully in the case of the First Bank. The capital was $35,000,000, one-fifth to be subscribed by the government, while one-fourth of the public subscriptions was required to be in coin and three-fourths either in coin or government securities. In order to be assured of an exclusive charter for twenty years, the bank was to pay the government a bonus of $1,500,000. Public deposits were to be made in the Bank of the United States unless the Secretary of the Treasury should order otherwise, laying his reasons for such order before Congress at its next session. In the event of failure to pay notes or deposits on demand in specie, the bank was to be obliged to pay 12 per cent annually on the amount of its obligations thus refused.

There was no trouble in selling the shares, but when they had been sold the subscriptions came in slowly. The original charter had provided that individuals should pay their subscriptions 30 per cent when subscribing, 35 per cent in six months, and 35 per cent in twelve months. When the time came for the payment of the second installment, the specie came in only to a small extent, and when the third installment fell due, very few of those who owed it met their obligations on time. The

bank discounted the notes of stockholders to a large amount, and made loans on its own shares to a substantial extent.

The effect of all this was to throw the institution practically into a condition of insolvency, and it required strenuous effort to get back to a working basis. Such a basis was, however, established by 1819; and, through an arrangement with the leading state banks, resumption of specie payments (which had been suspended during the war of 1812) was accomplished. From the time that the bank was placed in sane hands, however, it began to apply a rigid system of control to the state institutions and insisted on their keeping their notes redeemed in coin upon presentation. Branches were established here and there as needed and the note currency issued by it became a practically universal circulating medium. Although the bank carried on various operations that were probably outside the scope of its charter and did not conform altogether closely to the limitations with respect to methods of issuing circulating notes, it was undoubtedly the most powerful and best-managed financial institution the country had seen, and its effect was to supply a far greater soundness and a far higher degree of convenience and efficiency in making payments than had ever before been experienced.

The Second Bank, however, like its predecessor, fell into difficulties because of political opposition. There was, as usual, the antagonism of the state banks, which were restive under the restraining authority of the overshadowing federal institution and desired to see it done away with that they might get more business and be freer to do as they chose. Beside this there were large general influences of a political character militating against the bank, and the persistent opposition of President Jack-

son focused all this antagonism in an irresistible way. A recharter was consequently refused, just as in the case of the First Bank.

The bank then, in 1836, obtained a charter for thirty years from the state of Pennsylvania, thus becoming a state institution and retaining its original $35,000,000 of capital. Up to this point the bank had occupied a thoroughly sound position, but it now found itself with too large a capitalization for the more restricted field in which it was compelled to operate. The result was that loans of doubtful character were undertaken and finally the bank was obliged to suspend and go into liquidation in 1841.

Lessons of Central Bank Experience

The experience of the First and Second United States Banks is of great interest at the present time on account of the tendency toward centralized banking control. It should be noted, of course, that both the First and Second United States Banks were institutions of a decidedly different type from any that exist or would be likely to exist at the present day. Thus, in 1834, when the Second Bank of the United States was in a decidedly flourishing condition, its loans were $55,000,000, deposits about $11,000,000, circulation about $19,000,000 and specie about $10,000,000. It thus had approximately one-third of its circulation and deposits in the form of specie, while circulation was well toward double the amount of the deposits. This is undoubtedly a different condition from that which would be exhibited by any such bank at the present time. Its methods of doing business were also radically different from those that would be followed today. The lessons that can be obtained from the history of the First and Second Banks do not lie along the

line of routine banking business, but are rather to be found in connection with the type of government control and the relation between the central banks and the local banks.

It is plain that political questions will always be of considerable importance in connection with any government bank, and as in the case of the First and Second Banks they proved destructive, so they might wreck any governmentally controlled central bank. Whether these questions would be rendered easier of solution by allowing the small local banks to own the stock of the national bank and thereby eliminate their jealousy in a measure as well as some portion of the political controversy connected with such an institution, is a doubtful point.

The experience of the central banks shows that very excellent results could be obtained by giving to such an institution the management of public funds and intrusting it with the duty of making transfers and carrying on those portions of the fiscal duties of the government that are distinctly of a banking type. Experience with both these banks also shows the good results that can be obtained through the issue of a uniform bank-note currency, elastic in character, but amply secured by sound, short-time commercial paper accepted in the course of an exceedingly conservative loan and discount business.

~~Development of State Banking~~

While the Second Bank of the United States had been running its course, the various states had been experimenting with different kinds of banking systems, some successfully and others disastrously. In the course of this experience, almost every type of banking was attempted, and the result was the accumulation of a great fund of experience as to the best way in which not

to conduct banking. Among the distinct types of banking systems, developed during the first half-century of our national life, were the so-called New England system, the bond-secured system of New York, the "state banks" (banks owned and operated by state governments or at all events very closely controlled by them), and the so-called "credit systems" of banking. Of all these systems the one that stands out as having been conspicuously successful was that established in New England.

NEW ENGLAND SYSTEM

The New England banks had been chartered by the several states in which they existed, but very shortly came to feel a much higher degree of community of interest and to recognize a much stronger necessity for co-operative action than did the banks of any other section. This led to the development of a certain degree of uniformity in the banking laws of the New England states. As a result, there was a large territory through which a sound and safe state bank currency existed and which formed a striking contrast to the conflicting and largely unsound systems found in other portions of the United States.

The main outlines of this so-called "New England system" were as follows: Banks were allowed to issue notes as they pleased, without any special security behind the note other than the general assets of the institution. As a rule, however, they were forbidden to issue an amount of notes greater than 100 or 125 per cent of the amount of their capital. The capital itself had to be actually paid up within a reasonable length of time, and in some states the stockholders were required to be liable in case of loss to an amount equal to the amount of the

capital or in some cases to a greater amount. In Massachusetts the banks were not allowed to incur liabilities beyond a specified amount, and there was a more or less careful inspection and examination of accounts by state officials. The denominations of the bank notes were pretty generally regulated so as to prevent the issuing of too many small notes. In this way a fairly satisfactory degree of state control was secured, and the business of banking was placed upon a very substantial basis. So sound was the situation that the New England banks were able to maintain specie payments in 1814, when the other banks of the country suspended. They got into trouble in the panic of 1837 but were much less affected than were the banks elsewhere, returning to specie payments and sound methods considerably earlier.

~~Suffolk System~~ 7

One great element in the success of the New England banks was found in a plan which was not required of the banks by any law but was the result of voluntary co-operation on their part. This was the so-called "Suffolk system of redemption." The banks had found it hard to maintain constant and steady redemption of notes and observed that the sounder institutions suffered from the practices of those that were willing to go as far as they could in evading prompt redemption and in resorting to more or less questionable methods. The result was a desire to enforce prompt redemption of notes, and this was accomplished by the so-called "Suffolk system."

Under this system, the New England banks joined in establishing a redemption office in Boston, which was carried on by the Suffolk Bank. This bank was incorporated in Boston in 1818, and a substantial number of the

New England banks joined in a plan whereby they made a permanent deposit of $2,000 each with the Suffolk Bank and in addition such sum as was needed for the current redemption of notes. At first the country banks were unwilling to join the system because they found that their notes gained a wider circulation when they were at a slight discount, since in the latter case they displaced the notes of the Boston banks which were naturally held by the people who received them and who presented for redemption the depreciated country notes, these being paid out in the course of ordinary business.

The essential work of the Suffolk Bank, therefore, was to retire all the country notes it could get hold of and then send them home promptly for redemption. When the system had got fairly started, it was strong enough to retire the notes of large numbers of banks and thus compel immediate redemption, thereby greatly limiting the circulation of the banks that put these notes out. The country banks were finally obliged to yield and to make the required deposit with the Suffolk Bank, which thereafter redeemed their notes at par when presented, charged them up to the banks that had issued them, and sent them home whenever desired.

This system was tantamount to the establishment of a clearing house for note issues and practically offset the notes of one bank against those of another in making settlements. Consequently it was not long before the circulation of all the banks became much less redundant than it had been. Occasionally a bank, irritated by the limitation upon its circulation, withdrew from the system, but in such cases it usually found that its notes fell into discredit and were received only in the immediate locality where it was situated. The Suffolk Bank system thus furnished a striking object-lesson of the good effects

of prompt redemption of bank notes, and this was exceedingly influential in later banking legislation.

~~NEW YORK SYSTEMS~~ 6

Early banking in New York was conducted on the same general plan as in the first banks of New England—that is, without any specific security behind the notes. Charters were granted on a somewhat political basis by the legislature during the early years of the state, but a considerable number of defects appeared, just as was the case in New England prior to the development of more uniform legislation there and the institution of the Suffolk system of redemption. As about thirty bank charters were to expire between 1829 and 1833, it was considered a favorable opportunity for introducing a change. The result was the adoption of what was called the "safety-fund plan," the banks being rechartered under this system. By the plan proposed, each bank had to pay to the treasurer of the state an amount equivalent to one-half of 1 per cent of its capital stock until it had paid in 3 per cent of its capital. This then was treated as a joint fund to make good the liabilities of any insolvent bank if its assets were inadequate.

The fund proved to be insufficient during the difficult years after 1837; and, consequently, in 1842, the fund was made applicable simply to the notes of insolvent banks, the other liabilities being left to be paid out of the assets. This brought the liabilities that might become a charge against the safety fund more nearly within the control of the fund itself, but it broke down again in 1854. There had been some opposition to the safety-fund plan; and, as a result of a campaign for "free banking," the New York legislature passed the "free banking act" on April 18, 1838.

Under this act any group of individuals might establish a bank and issue notes, but they could get the notes only from the state comptroller after depositing with him bonds of the United States or the state of New York or of any other state approved by the comptroller, while, under certain circumstances, they could also issue notes secured by bonds and mortgages upon improved productive real estate. There was a considerable development of banking under this law, but the note issues had very little elasticity and were not as satisfactory as those of the safety-fund banks. The system was gradually perfected, however, until the notes protected by special deposits of securities were very safe.

~~"State Banks"~~ 6

The success of the First and Second United States Banks naturally led to the growth of imitations and, in a number of states, banks modeled upon the federal institutions were established. Thus the states of South Carolina, Ohio, Indiana, and some others created institutions some of which proved exceedingly successful.

Perhaps the best example of banks of this kind was the institution established by the state of Indiana in 1834. This bank had a capital of $1,600,000, one-half owned by the state and the other half by private individuals though the state was in full control. One parent institution at Indianapolis and ten branches, each with a capital of $160,000, made up the organization. The parent bank did no business but consisted merely of a president and board of directors who controlled the operations of the branches which thus constituted a system of banks. The management of the bank was throughout careful and scientific and the profits were very handsome. The bank made its loans largely through the issue of notes and these notes

were redeemed in specie upon presentation. The hostility of politicians led to the discontinuance of the bank, and a free banking system was established.

Other state banks worked along very much the same lines, and wherever the management was honest and careful and the capital was bona fide, the result was successful. In various cases, however, banks were established without adequate capital, their chief assets consisting of state securities which were of doubtful value and their specie being limited in amount. In other states imitations of the New York free banking system, with requirements based on the compulsory deposit of bonds or mortgages with the state authorities, were not infrequent and of course did not produce notes of greater soundness than the securities on which they were based. Thus a great many unsound banks issuing "bond-secured notes" came into existence. They were no worse and no better than the banks that were established after the New England plan, issuing notes based on the general assets of the institutions but unprotected by any special deposit.

Growth in Soundness

Out of all these conflicting systems, there developed a gradual tendency toward better banking conditions and wise management. After the discontinuance of the Second Bank of the United States, there ensued a severe panic starting in 1837 and due in part to unwise banking and the undue extension of credit upon improper or inadequate security. The result was to enforce the banking lessons that had already been afforded and to warn the banks against repetition of the practices which had led to inflation and disaster. There was a gradual improvement in methods between 1840 and 1860. But the evils

of a decentralized, widely diffused, and uncontrolled system of banking continued to exist.

At the opening of the Civil War, there were more than 1,600 kinds of bank notes in circulation. Counterfeits were numerous and, except for voluntary arrangements made by groups of banks among themselves, there was nothing to compel any bank to receive the notes of any other bank. Redemption facilities were crude and poor throughout most of the country, and there was a strong feeling in favor of some change in the direction of more powerful central control that would guarantee a more uniform note issue. The need of such control was emphasized by further banking difficulties in 1857; which, although by no means so severe as those of preceding periods of panic, were nevertheless disturbing. Start at, 45 r, go back

INDEPENDENT TREASURY SYSTEM ESTABLISHED 19

Meanwhile the government, discouraged and annoyed at the experience it had had after the discontinuance of the Second Bank of the United States, had established the so-called "independent treasury system." Prior to this an effort had been made to fall back once more upon the state banks, the deposits of the government formerly kept with the Bank of the United States being apportioned or distributed among a number of banks. The panic of 1837 and the resulting suspension embarrassed the government and enforced the necessity of getting some plan that would retain the funds under real and genuine control of the federal administration. After various expedients had been suggested and their adoption had been unsuccessfully sought, Congress created the independent treasury system which assumed substantially its present form in 1846.

The idea of this system was that the government should entirely dissociate itself from the state banks and should pay only coin and receive only coin. Whenever it had a surplus or money on hand, such funds were to be kept in specie in vaults provided for that purpose. It was reasoned that this would keep the government entirely independent of the banks and their vicissitudes. The system was put into operation and was carried on with fair success down to the opening of the Civil War. During that time, expenses and incomes were not far from being in a condition of equilibrium, and the system worked with comparative smoothness.

It was evident, however, even at that comparatively early date, that conditions might easily arise under which the sub-treasury system would not be feasible. It was seen that, should there be a heavy surplus, it would inevitably operate to draw out of the circulation and out of the banks a substantial percentage of the money of the country, retiring it from use until such time as the government should see fit to pay it out again in the ordinary course of its business. Because the amount of government transactions was not very large, and because taxes were correspondingly light, while a fair adjustment of revenue to expenditure had been obtained, this was not an immediate or pressing question, but every observer closely familiar with the conditions, recognized that such a situation might easily develop, and that the sub-treasury system would then become an extremely difficult means of managing the fiscal affairs of the government. The Civil War, therefore, found the government with its fiscal system entirely divorced from the banking system of the country and with the banks disorganized and subject to no uniform or joint control.

~~Banks and the Treasury~~ 11

At the opening of the Civil War, it was promptly seen that very definite fiscal expedients would have to be adopted. The customs duties fell off as soon as the war came on; and, as these had been the principal source of revenue, the federal administration was sadly in need of funds. It undertook to borrow money from the banks and then, although Congress had granted permission to suspend the Independent Treasury Act in certain respects, the administration insisted on drawing out the installments of the loan from the banks which had agreed to make it. The banks had expected that, instead of being compelled by the Treasury to pay coin as they would under ordinary circumstances have had to do, they would be allowed to keep the funds on deposit in their vaults and simply transfer them at the government's order to public creditors. The effect of drawing off the specie from the banks and placing it in the Treasury was to weaken the reserves and finally to lead to a suspension of specie payments, the banks refusing to pay out gold or silver on demand.

Meanwhile the necessities of the government had been mounting very rapidly and it had been unwisely determined to issue legal-tender Treasury notes (popularly known as "greenbacks"). The first issue of these notes came out in 1862 and was followed by other issues. As the notes were legal tender they could be used in redeeming bank notes. They took the place of gold and silver coin, these metals being retired from circulation and hoarded or exported. The result was that the country was speedily placed on a basis of irredeemable paper. It was now without a metallic circulation, without any large financial institution on which to fall back, without any

uniform bank-note currency, and without any substantial control over the banks. The constant and enormous demand for funds with which to carry on the war could not be satisfied by any other means than huge loans on long time, accompanied by heavy taxation designed to supply the funds for paying the interest on the bonds and ultimately redeeming them as they fell due. In endeavoring to sell such bonds, the federal government encountered lamentable difficulty and was driven to various expedients for pushing the securities into the hands of buyers.

Among other schemes that suggested themselves to the Treasury authorities was that of organizing a banking system similar to the free banking system of the state of New York. The basic idea of this system was that of allowing the banks to issue notes on condition that they should deposit with the Treasury securities in proper amount to protect the notes they issued. It was supposed that by requiring them to buy United States bonds to serve in this capacity, the government might create a strong demand for such bonds and that, as a result, it would be found easier to sell the securities, while their price would probably be proportionately better.

On the other hand, it was argued, this system would be so popular that the state banks would be unable to compete with it. They would rush into the system and consequently the country would be supplied with a uniform currency, issued by a set of banks directly under the control of the national government, responsible to that government and purchasing its bonds as a basis for the issue of its notes. This was the fundamental idea upon which the present national banking system was based. It was designed primarily as a device of national finance rather than as a service to industry.

TEST QUESTIONS

1. What is the object of studying the history of banking?
2. Why is the history of the nineteenth century especially rich in experience?
3. What was the nature of the first bank of the United States? How was it organized? What was its relation to the government?
4. What two great Americans are associated with our early banking and financial systems?
5. Give an account of the second bank of the United States and the causes of its downfall.
6. What lessons did these early banking experiences give us?
7. Explain the main features of the New England system of banks.
8. What did the Suffolk Bank attempt to accomplish?
9. What were the essential features of the New York systems?
10. Explain the attempts to establish genuine "state" banks. After what were they modeled?
11. What is meant by the independent treasury system?
12. What causes lead to the adoption of the independent treasury system in American public finance?

CHAPTER XV

THE NATIONAL BANK ACT

Nature of the Act

The first act "to provide a national currency secured by a pledge of United States stock and to provide for the circulation and redemption thereof" became a law February 25, 1863. This was found defective in some particulars and was amended during the following year. The Act contained most of the provisions which had been found necessary in the experience with state banks during preceding years. It provided for inspection and examination on the part of the federal government through a currency bureau, for the maintenance of reserves, the redemption of notes over the counter of the issuing bank and at agencies in certain principal cities, for the conversion of state banks into national banks, for the deposit of public moneys in banks when necessary upon security of United States bonds, for the taxation of the banks, and numerous other points, some of the more important of which have already been mentioned in foregoing discussions.

The striking feature of the Act was seen in the provisions which controlled the objects for which it had been created and which governed the methods of note issue in a certain degree. The banks were required to buy government bonds as an incident to their receiving charters. At least 25 per cent of the amount of the capital had to be put into government bonds by the smallest

class of banks. This requirement became smaller as the capital of the bank became larger, and in the large banks the amount of bonds bought was a comparatively small percentage of the capitalization. Notes could be issued to the amount of 90 per cent of the par value of the bonds held by the institution, such bonds being in any event deposited in trust with the Treasury Department. The amount of notes to be issued in the aggregate was, however, limited to $300,000,000, and this amount was apportioned to the several states according to population and existing banking conditions.

With the comparatively rigid restrictions imposed by the Bank Act, with the requirement that bonds be purchased, and with the necessity incumbent upon state banks that they change their names before entering the system, the existing institutions were somewhat slow to give up their old charters and reorganize under the national law. The effect of this hesitation was to prevent the banks from rushing into the new system as they had been expected to. Late in 1864, there were only 584 banks in the system, and they had outstanding a circulation of only $65,000,000. The results which were expected in the way of a demand for United States bonds originating with the national banks were consequently not realized.

The national banking system did not materially influence the demand for bonds, but the advantages arising out of the creation of a uniform currency were more and more generally recognized, and various administrators who had opposed the plan at first, became advocates of it. Some went so far as to urge that legislation be adopted whereby state banks would practically be compelled to cease issuing notes, and in harmony with such recommendations Congress in the Act of March 3, 1865, imposed

a tax of 10 per cent on state bank issues beginning with July 1, 1866. Thereafter the banks came into the system much more rapidly and there was a considerable drift away from the state banking systems. It was speedily perceived, however, that the state systems, even without the power to issue notes, had a place of their own. Some of the strongest state banks preferred to retain their charters under state laws and to go on doing a discount and deposit business.

Development of the System

The power to control note issues, and the prestige resulting from federal supervision, however, gave the national banks the lead and from 1866 onward they were rapidly organized, extending into the South as soon as the Civil War had closed. Great difficulty was experienced in consequence of the limitation of the note issues to \$300,000,000 in the aggregate. In 1866 the national bank circulation amounted to about \$280,000,000. This sum was very badly distributed. The wealthier and older parts of the North had secured a large share of the notes. In New England much more than the due proportion belonging to them had been acquired by the banks while the South was unable to get much currency, notwithstanding that it was sorely in need of some notes to take the place of the Confederate currency which had driven out specie. The maximum limitation had been set partly because Congress feared that in a time of suspension of specie payments, such as then existed throughout the country, permission to issue notes up to any amount of bonds that the banks might deposit (not exceeding their capital) might lead to an over-issue of bank notes which would operate still further to postpone the date of redemption.

The national government was, therefore, not willing to relieve the shortage of currency by removing the limitation, but finally sought to help matters somewhat by enlarging the maximum limitation to $354,000,000, while it was further provided that $25,000,000 should be withdrawn from those states that had more notes than their share and issued to banks and states which had less than their share. The provision was so complex, and the rate of interest was so high in the South and West as compared with the comparatively low interest earned on the bonds which had to be deposited in order to get the notes, that there was relatively little disposition on the part of the southern and western banks to act under the law of 1870. In fact, this demand was so slack that it did not prove necessary to withdraw the $25,000,000 in notes from banks that had more than their proportionate share.

When Congress finally got to the point, in 1875, where it felt able to provide for the resumption of specie payments, it also dealt with the bank-note question by repealing all limitations upon the issue of bank notes to any amount, subject to the general limitations and requirements of the law with reference to bonds and capital. This change helped the situation considerably. There was a decided increase in the development and prosperity of the national system, and on the other hand a decided growth of opposition sprang up. The system was, however, by this time thoroughly well established and, after the resumption of specie payments in 1879, the notes of the banks were equivalent in value to gold and provided an unquestionably stable and satisfactory curreney so far as questions of safety and security were concerned. Changes, however, had occurred in the fundamental basis upon which the national banking sys-

tem was founded, and the result was a tendency to decrease the amount of circulation outstanding.

Rise in Price of Bonds

As has been seen, the banks were required to deposit $100 in bonds for every $90 which they received in notes. Supposing the bonds employed for this purpose bore 6 per cent, it is plain that a bank that had $100 in gold coin or other legal-tender money could (if the bonds were at par) buy $100 in bonds, thus getting 6 per cent interest thereon, deposit the amount with the secretary of the Treasury, receive back $90 in notes, and then lend these notes to borrowers at such a rate of interest as they were willing to pay. The following of this plan led in some quarters to the bringing forward of an argument now very familiar—that banks, by reason of the bond deposit system, were able to make a "double profit," inasmuch as they got the interest on the bonds and the interest on the notes.

As a matter of fact, there was no foundation for this complaint. A "double" profit is what every banker has to make in order to pay the special expenses of banking, otherwise he might as well use his capital in loans on real estate or other security. If the banker had $100 in gold to start with, he would do very much better for himself were he to use the cash as a reserve and simply make his loans by granting credits on his books than he would were he to follow the plan of buying bonds and getting notes to be loaned. In practice, if the banker were able to lend four times the amount of his reserve he would get the interest on $400 of loans and maintain a reserve of $100 in coin, while in the national system if he took out notes he would get the interest on $100 in bonds and $90 in notes even if he did not have to supply a reserve

behind these notes—which of course he would be obliged to do, either in the form of a redemption fund with the Treasury, or as a cash reserve in his vaults.

It is obvious that the higher the price of the bonds went the less would be the profit to be derived from notes since, under the original national act, the banks could only get 90 per cent of the par value. Thus, if bonds stood at 125 it is clear that the banker would have to spend $125 in order to get a bond whose par value was $100 and on the strength of which he could only get $90 in notes. This would mean that there was a margin of $35 between the amount paid for the bond and the amount of notes obtained, on which there was no return. During the years after 1870, the price of bonds steadily rose and this process was accelerated after 1875 when resumption was decided on.

A further influence tending to stimulate the price of bonds came from the redemption of portions of the debt out of surplus revenues. Not only did the issue of circulation become less profitable to the banks, but they also saw opportunities for making a substantial profit by selling their bonds at the higher prices that had become the rule. Under the influence of these conditions, the national circulation, which had risen to about $350,000,000 at the end of 1873, fell off nearly $50,000,000 during the succeeding three years. Subsequently, there was a slight expansion, and then the reactionary movement set in once more. In 1879—the resumption year—the circulation was only $323,000,000.

Congress was now under the influence of the anti-banking sentiment which had developed throughout the country, and in 1881 passed a bill requiring 3 per cent bonds which were to be issued for the purpose of refunding the national debt to be used by the banks as security

for circulation. Other provisions in the act would have made it difficult or impossible to reduce circulation any further, and the result was a sharp retirement of notes in anticipation of the passage of the law. The measure was vetoed but, while a good many bonds that had been withdrawn were redeposited, the movement toward the curtailment of circulation had now definitely begun.

Growth of a Government Surplus

The curtailment of bank currency under the national system which had set in in consequence of the natural causes already set forth, which grew out of the greater prosperity of the country and the more stable condition of its finances, was now to be still further aided as a result of the growth of a great government surplus. The Treasury had been buying bonds and thereby reducing indebtedness during the later seventies as occasion offered. But the process went forward even more rapidly after 1880. Revenues were abundant and largely in excess of the amount needed for government expenses. Consequently, under the independent treasury law whose features have already been noted, only two uses could be made of these excess funds. They might be kept on hand in money in the vaults or they might be deposited with the banks. The latter operation, however, necessitated the depositing of government bonds with the Treasury as security.

It was found that if the Treasury used the surplus funds to buy up issues of bonds in the market before they were due it raised the price of the bonds so high that it became expedient for the national banks to sell as many of their bonds as they could and reduce their circulation to as low a point as possible, while if the funds were deposited in the banks, the latter were obliged to buy the

bonds in order to use them as security with the Treasury for the holding of the deposits. They thus raised the price of the bonds in the market through their own action and made it unprofitable for themselves to use such bonds for the maintenance of outstanding circulation. During the years 1881-1891, the bonded debt of the United States was cut by more than $1,000,000,000. The price of the bonds rose tremendously and in 1891 the lowest average price was more than 124. The effect of these changes was instantly perceived in the national bank circulation, which dropped from $323,000,000 in 1879 to $173,000,000 in 1892. It almost seemed as if the issue of notes would be cut to the absolute minimum corresponding to the volume of bonds required by the law to be deposited as a prerequisite to the existence of the banks.

Deficit Financiering

New conditions set in after 1890. The tariff act of that year had been so drafted as to cause a large decrease in the annual net revenue and it was shortly apparent that, instead of having funds with which to buy more bonds, the government would have to borrow money on new bonds. Conditions were complicated by the silver-purchase policy which had been followed by the government since 1878 and which was carried further by the silver-purchase law of 1890. This policy contributed to the panic of 1893, although the silver-purchase law was repealed in that year. Issues of new bonds were made by the government, during the second Cleveland administration (1893-1897), to the amount of some $252,000,000. This and the cessation of the silver-purchase policy and of the issues of notes based on silver by the government somewhat helped the bank circulation to increase, and in

1896 the total notes outstanding had grown to about $214,000,000.

Dissatisfaction with the whole idea of a bond-secured currency had, however, begun to develop, and there was a demand for the abolition of the bond deposit requirement. Secretary of the Treasury Carlisle urged the repeal of the bond deposit requirement (1894), and President Cleveland supported the idea of real currency reform. The same idea was supported by representative bankers of the country who, in a convention in Baltimore in 1894, put forward the so-called "Baltimore plan," in which they advocated the issue of circulating notes by national banks without bond deposit up to 50 per cent of their paid-up capital secured simply by general assets and by a guaranty fund jointly deposited by the banks with the United States Treasury. The ideas thus put forward were far too radical to gain a general or sympathetic hearing from the country at large, which was now taken up with the free-silver agitation and was inclined to condemn any plan which, in the popular estimation, tended to afford a greater degree of liberty or a greater profit-making opportunity to the banks.

Although the banks of the national system continued to grow in numbers and in the amount of their operations, the question of banking legislation was thrown into the background as a result of the preponderating influence of the monetary-standard question, and, notwithstanding a party pledge in favor of monetary and banking legislation given by the Republicans in 1896, nothing was done until the passage of the so-called Gold Standard Act of 1900. By that year the number of banks had increased to 3,602 as compared with 2,052 in 1880. The growth since 1890 when there were 3,326 banks, had, however, been slow and there had even been a retrograde move-

ment since 1894, in which year there were 3,784 banks. Altogether, not only the party pledge but also the condition of the banking system, the slow growth of the circulation, the high price of bonds, and the fact that the surplus problem was reappearing contributed to the passage of legislation in 1900 in which it was sought to remedy some of the difficulties that had already been manifested.

Act of 1900

The Act of 1900 made several important changes in the existing monetary and banking situation as well as in the fiscal organization of the Treasury. It will not be necessary, however, to do more than note the particulars in which it altered the banking system. Two innovations of considerable importance were introduced. Previous to 1900, $50,000 was the smallest capital with which a national bank could be organized. This was now reduced to $25,000. Further, the Act made provision for the refunding of the national debt into 2 per cent bonds and the use of these bonds by the banks as security for their circulation. It also raised the amount of bank notes that could be issued against a bond from 90 per cent of its par value to 100 per cent. The tax on notes secured by 2 per cent bonds was also cut to one-half of 1 per cent instead of 1 per cent.

These changes were of considerable importance. They rendered it possible to get out a much larger volume of notes with a given amount of bank capital, and to that extent rendered the note issue more profitable. This removed some of the checks which had operated to keep banks from organizing under the national system rather than under the state systems. The banks entered the system quite rapidly and there was a particularly large

addition in the $25,000 class. Starting with 3,602 banks in 1900, the number rose to 5,528 in 1905 and 7,600 in 1915. Nearly 2,400 banks with a capital of less than $50,000 were taken into the system during the seven years succeeding the passage of the Act, and of these a great many were state banks which surrendered their old charters and became national banks organized under the direction of the federal government.

Surplus Difficulties

The difficulty with the surplus had again reappeared and had assumed a serious form as early as 1902-03, continuing with some fluctuations and changes to cause trouble until 1907. The problems presented to the Treasury in relation to banking during those years were substantially similar to those which had arisen during preceding periods of the same sort. The accumulation of funds in the vaults of the government tended too strongly to reduce the volume of money in use, and consequently it was desirable to get the cash out into circulation once more. However, the opportunity for reducing the debt was now less favorable than it had previously been, and the Department was thus driven to fall back upon deposits of government money with the banks.

The rapid growth in the national bank-note circulation from about $332,000,000 in 1900 to about $666,000,000, or more than double its original figure in 1908, had absorbed a large quantity of the 2 per cent bonds, while the use of bonds as security for government deposits took another large block. The result was that in the years 1906 and 1907 only a small margin of available bonds that could be used for the purpose of increasing circulation in case of necessity was anywhere to be seen. It was plain that,

in the event of difficulty in securing adequate note circulation at any time, it would not be easy to get relief through the national banks, for the reason that the banks would find it very hard to buy many bonds on which to base note issues. This difficulty had been so apparent as the surplus in the banks grew larger that, notwithstanding the existence of a very large surplus, Congress authorized the Secretary of the Treasury to obtain funds for the construction of the Panama Canal by issuing bonds. He was thus able to supply some bonds when needed as a basis for bank-note issues, but the margin thereby provided was not large.

The Secretary of the Treasury subsequently assumed the authority to permit the substitution of approved municipal, state, and railroad bonds for the government bonds that were held behind public deposits. The law was too positive and explicit to permit of his allowing the substitution of these other bonds for national bonds behind bank notes, but he attained somewhat the same end by substituting the outside bonds as a backing for deposits, thus releasing the national bonds held for that purpose and transferring them to the account of the bank circulation. It is highly questionable how far these measures were expedient. They, however, assisted banks in continuing the upward movement of loans and discounts upon which they had embarked and enabled them to avoid retrenchments and curtailment except sporadically.

Panic of 1907

The limit of the movement was reached in 1907, when the banks had so extended their loans that they could go no further, while the Treasury had almost exhausted its power of relieving them by depositing cash at moments

of stringency. Starting with a brief but acute panic in the early spring, the country gradually worked toward an attack of depression and suffering of a graver nature. This came on in the autumn and was characterized by the same symptoms that had been noted in previous periods of like character. Banks the country over were unable to pay in cash, and in the larger places they were obliged to resort to the issue of clearing-house certificates. The Treasury did what little it could to help the depositing of its remaining cash with the banks, but it proved to be almost impossible to enlarge the bank circulation in any very material degree, although some relief was obtained by further transfers of bonds from deposit account to circulation account and the substitution of non-national bonds behind public deposits.

Currency Legislation of 1908

When Congress met in December, 1907, it was obliged to face a strong demand from the country generally for legislation which would relieve existing conditions and would make it possible to get a currency needed by the banks at such times as genuine demand might be exhibited. Various bills were introduced, but the two that shortly assumed greatest prominence were those of Representative Charles N. Fowler of New Jersey, then Chairman of the House Banking and Currency Committee, and Senator N. W. Aldrich of Rhode Island, Chairman of the Finance Committee in the Senate. These bills represented the two radically distinct points of view on the currency and banking question whose development we have already traced.

The Fowler bill embodied a great many features that would have resulted in modifying the national banking system at important points, but in substance its aim was

to create district organizations of groups of banks which were to issue currency based simply upon the assets of the banks. The Aldrich bill did little more than to permit the substitution of specified classes of outside bonds as security behind future issues of national bank notes instead of the national bonds already required. This idea of course necessitated a tolerably complex piece of legislation in order to adjust the proposal to existing methods of banking and to the old currency in such a way as not to lower the value of the national bonds which were already used as security for bank notes. But the fundamental object of the law was merely what has just been stated.

The opposition between the two proposed bills lay in the fact that whereas the Fowler plan would have given greater scope to those banks which did a "straight" commercial paper business, the Aldrich plan was calculated to give aid chiefly to those banks that were engaged in bond jobbing and speculative operations and which held securities whose values they desired to "boom." The opposition between the two plans seemed to be irreconcilable. Finally the House party organization headed by the speaker put forward a new bill known as the "Vreeland bill" from the name of its putative author, in which provision was made for the issue of currency by organizations of banks upon their joint responsibility. This was at first spoken of as a "clearing-house currency bill" and the organizations were referred to as "clearing houses" although they had none of the functions of genuine clearing houses. A modified bill of this sort was put through the House and then went to the Senate, where it was combined with the Aldrich bill and then passed by both Houses.

In its final shape, the Act provided that any bank might

deposit with the Treasury state, municipal, or county bonds up to a specified amount, provided it had already taken out national bank notes based on government bonds to an amount equal to 40 per cent of their capital. The total issue of notes in the case of any bank, including both the old and new kinds of notes, was not to exceed the capital and surplus of the bank. "National currency associations" might also be organized by any number of banks not less than ten which had a combined capital of not less than $5,000,000. These associations might accept from their members any securities, including commercial paper (the latter to be used to an amount not in excess of 30 per cent of the capital and surplus of the issuing bank) and might then make application to the Secretary of the Treasury for notes which could be issued to 75 per cent of the cash value of the commercial paper. Such notes were to be jointly a liability upon the banks in the national currency association.

A great deal of work was entrusted to the Secretary of the Treasury in connection with the detailed organization of the currency associations. He prepared regulations governing them, but the conditions were too onerous to tempt banks to enter the associations and consequently only one was organized, no notes being taken out either directly through the deposit of outside bonds with the Treasury or indirectly through a national currency association.

TEST QUESTIONS

1. When did the National Bank Act go into effect?
2. What were the circumstances that led up to its enactment?
3. What were the antecedents of the National Bank Act?
4. What provisions did the act make for absorbing United States bonds?

5. Explain the early difficulties encountered in securing an equitable territorial distribution of national bank notes and the provisions for relief adopted by the government.

6. Explain the "double-profit" charge made against national banks as a result of the note-issue privilege.

7. How did the growth of the government surplus during the years 1881-91 affect note circulation? Why?

8. What were some of the outstanding shortcomings of the National Bank Act as revealed in the experiences of 1893-97?

9. What changes were made by the Act of 1900?

10. What was the occasion of the currency legislation of 1908?

11. Explain the provisions for elasticity of currency incorporated in that law.

CHAPTER XVI

THE FEDERAL RESERVE ACT

History of the Act

There was no serious effort at further legislation until 1912, when preparation was begun in the House of Representatives for the presentation of a new measure. Without at present entering into the history of the process by which the measure itself was framed, between April, 1912, and June, 1913, it may be generally said that during the period referred to a preliminary draft of what later became the Federal Reserve Act was shaped under the auspices, first of a sub-committee of the House Banking and Currency Committee as organized in the Sixty-Second Congress, Hon. Carter Glass of Virginia being chairman of the sub-committee in question, and then under the auspices of Mr. Glass himself as the ranking Democratic member and prospective chairman of the banking and currency committee to be organized in the House of Representatives of the Sixty-Third Congress.

Upon the basis of careful investigation, conducted under direction and supervision of the committee, partly at public hearings during the winter of 1912-1913, partly by private investigations, it had been determined what features should and what points should not be embodied in the proposed measure. The bill thus drafted had been submitted to and had received the approval of President Woodrow Wilson, and was thus, when introduced in the

House of Representatives on June 18, an administration bill in the sense that it had received the approval of those charged with administrative responsibility, while it had been developed by the authorized legislative agencies of Congress.

Essential Features of Original Bill

As thus drafted for presentation, the banking bill covered certain main points, which were subjected to no serious change and which have been succinctly reviewed in a report, submitted to the House on September 9, 1913, by Chairman Glass on behalf of the Banking and Currency Committee, as follows:

After looking over the whole ground, and after examining the various suggestions for legislation, some of which have just been outlined, the Committee on Banking and Currency is firmly of the opinion that any effective legislation on banking must include the following fundamental elements, which it considers indispensable in any measure likely to prove satisfactory to the country:

1. Creation of a joint mechanism for the extension of credit to banks which possess sound assets and which desire to liquidate them for the purpose of meeting legitimate commercial, agricultural, and industrial demands on the part of their clientele.

2. Ultimate retirement of the present bond-secured currency, with suitable provision for the fulfillment of government obligations to bondholders, coupled with the creation of a satisfactory flexible currency to take its place.

3. Provision for better extension of American banking facilities in foreign countries to the end that our trade abroad may be enlarged and that American business men in foreign countries may obtain the accommodations they require in the conduct of their operations.

Beyond these cardinal and simple propositions the committee has not deemed it wise at this time to make any recommendations,

save that in a few particulars it has suggested the amendment of existing provisions in the National Bank Act, with a view to strengthening that measure at points where experience has shown the necessity of alteration.

In order to meet the requirements thus sketched, the committee proposes a plan for the organization of reserve or rediscount institutions to which it assigns the name "federal reserve banks." It recommends that these be established in suitable places throughout the country to the number of 12 as a beginning, and that they be assigned the function of bankers' banks. Under the committee's plan these banks would be organized by existing banks, both national and state, as stockholders. It believes that banking institutions which desire to be known by the name "national" should be required, and can well afford, to take upon themselves the responsibilities involved in joint or federated organization. It recommends that these bankers' banks shall be given a definite capital, to be subscribed and paid by their constituent member banks which hold their shares, and that they shall do business only with the banks aforesaid, and with the government. Public funds, it recommends, shall be deposited in these new banks, which shall thus acquire an essentially public character, and shall be subject to the control and oversight which is a necessary concomitant of such a character. In order that these banks may be effectively inspected, and in order that they may pursue a banking policy which shall be uniform and harmonious for the country as a whole, the committee proposes a general board of management intrusted with the power to overlook and direct the general functions of the banks referred to. To this it assigns the title of "The Federal Reserve Board." It further recommends that the present national banks shall have their bonds now held as security for circulation paid at the end of 20 years, and that in the meantime they may turn in these bonds by a gradual process, receiving in exchange 3 per cent bonds without the circulation privilege.

In lieu of the notes, now secured by national bonds and issued by the national banks, and, so far as necessary in addition to them, the committee recommends that there shall be

an issue of "federal reserve notes," to be the obligations of the United States, but to be paid out solely through federal reserve banks upon the application of the latter, protected by commercial paper, and with redemption assured through the holding of a reserve of gold amounting to 33⅓ per cent of the notes outstanding at any one time. In order to meet the requirements of foreign trade, the committee recommends that the power to establish foreign branch banks shall be bestowed upon existing national banks under carefully prescribed conditions and that federal reserve banks shall also be authorized to establish offices abroad for the conduct of their own business and for the purpose of facilitating the fiscal operations of the United States Government. Finally and lastly, the committee suggests the amendment of the National Bank Act in respect to two or three essential particulars, the chief of which are bank examinations, the present conditions under which loans are made to farming interests, and the liability of stockholders of failed banks. It believes that these recommendations, if carried out, will afford the basis for the complete reconstruction and the very great strengthening and improvement of the present banking and credit system of the United States. The chief evils of which complaint has been made will be rectified, while others will at least be palliated and put in the way of later elimination.

The federal reserve banks suggested by the committee as just indicated would be in effect co-operative institutions, carried on for the benefit of the community and of the banks themselves by the banks acting as stockholders therein. It is proposed that they shall have an active capital equal to 10 per cent of the capital of existing banks which may take stock in the new enterprise. This would result in a capital of something over $100,000,000 for the reserve banks taken together if practically all existing national banks should enter the system. It is supposed, for a number of reasons, that the banks would so enter the system. More will be said on this point later in the discussion. How many state banks would apply for and be granted admission to the new system as stockholders in the reserve banks cannot be confidently predicted. It may, however, be fair to assume

at this point that the total capital of the reserve banks will be in the neighborhood of $100,000,000. The bill recommended by the committee provides for the transfer of the present funds of the government included in what is known as the general fund to the new federal reserve banks, which are thereafter to act as fiscal agents of the government. The total amount of funds which would thus be transferred cannot now be predicted with absolute accuracy, but the released balance in the general fund of the Treasury is not far from $135,000,000. Certain other funds now held in the Department would in the course of time be transferred to the banks in this same way, and that would result in placing, according to the estimates of good authorities, an ultimate sum of from $200,000,000 to $250,000,000 in the hands of the reserve banks. If the former amount be assumed to be correct, it is seen that the reserve banks would start shortly after their organization with a cash resource of at least $300,000,000. As will presently be seen in greater detail, it is proposed to give to the reserve banks reserves now held by individual banks as reserve holders under the National Bank Act for other banks. Confining attention to the national system, it is probable that the transfer of funds thus to be made by the end of a year from the date at which the new system would be organized would be in the neighborhood of $350,000,000. If state banks entered the system and conformed to the same reserve requirements they would proportionately increase this amount, but for the sake of conservatism the discussion may be properly confined to the national banks. For reasons which will be stated at a later point, it seems likely that at least $250,000,000 of the reserves just referred to would be transferred to the reserve banks in cash; and if this were done the total amount of funds which they would have in hand would be at least $550,000,000. This would create a reservoir of liquid funds far surpassing anything of similar kind ever available in this country heretofore. It would compare favorably with the resources possessed by government banking institutions abroad.

It will be observed that in what has just been said the reserve banks have been spoken of as if they were a unit. The committee,

however, recommends that they shall be individually organized and individually controlled, each holding the fluid funds of the region in which it is organized and each ordinarily dependent upon no other part of the country for assistance. The only factor of centralization which has been provided in the committee's plan is found in the Federal Reserve Board, which is to be a strictly government organization created for the purpose of inspecting existing banking institutions and of regulating relationships between federal reserve banks and between them and the government itself. Careful study of the elements of the problem has convinced the committee that every element of advantage found to exist in co-operative or central banks abroad can be realized by the degree of co-operation which will be secured through the reserve-bank plan recommended, while many dangers and possibilities of undue control of the resources of one section by another will be avoided. Local control of banking, local application of resources to necessities, combined with federal supervision, and limited by federal authority to compel the joint application of bank resources to the relief of dangerous or stringent conditions in any locality are the characteristic features of the plan as now put forward. The limitation of business which is proposed in the sections governing rediscounts, and the maintenance of all operations upon a footing of relatively short time will keep the assets of the proposed institutions in a strictly fluid and available condition, and will insure the presence of the means of accommodation when banks apply for loans to enable them to extend to their clients larger degrees of assistance in business. It is proposed that the government shall retain a sufficient power over the reserve banks to enable it to exercise a directing authority when necessary to do so, but that it shall in no way attempt to carry on through its own mechanism the routine operations of banking which require detailed knowledge of local and individual credit and which determine the actual use of the funds of the community in any given instance. In other words, the reserve-bank plan retains to the government power over the exercise of the broader banking functions, while

it leaves to individuals and privately owned institutions the actual direction of routine.

Congressional Action on the Bill

As first presented, the bill was taken in hand by the House Committee on Banking and Currency, which, however, had not been named until a few days previous to the introduction of the measure. The committee held its first meeting on June 6; then began the active work of considering the bill on July 7; and regular sessions of several hours each day continued until the beginning of September. The bill was then reported to a Democratic caucus, and after about two weeks of discussion behind closed doors was ratified, and was thereupon formally reported, on September 9, to the House of Representatives, where it was taken under debate on September 10, and ultimately brought to a passage in the House on September 18.

It was then sent to the upper chamber and was taken under advisement in the Senate Banking Committee, where extensive hearings were promptly begun and were continued until October 25. Thereafter, a month of consideration in committee ensued, and subsequently three days of caucus consideration in the Senate, a final report to the Senate as such being rendered on December 1. Debate then began and was continued, first in the intervals of business already scheduled, then at practically continuous sessions until December 19, when a final vote was secured and the measure within twenty-four hours sent to conference, from which it emerged on December 22, receiving, as already stated, the President's signature on the following day.

As the bill ultimately passed the Senate, it differed from the plan of the House in no respect that was of

theoretical importance. It retained the provision for sales of stock to private holders and for the voting of the stock by trustees representing these holders, as well as for the purchase of stock by the United States itself, in case of necessity for so doing. It, moreover, introduced a change in the method of distributing the earnings of federal reserve banks whereby a portion of those earnings was to be employed for establishing a fund for guaranteeing the deposits of member banks which had taken stock in the federal reserve banks of their district. It altered the number of banks by cutting it to not less than 8 and not more than 12, in place of the "at least 12" of the House bill. While many minor changes and alterations of wording were made throughout, they did not alter the essential structure of the plan, but in some cases carried it further than the framers of the House measure had been able to do, embodying ideas that had been urged by them while the measure was under discussion, but for which they had not succeeded in obtaining indorsement. Perhaps the most injurious features which were added during the Senate stage of the measure were the provision cutting reserves of member banks to too low a point and that permitting the introduction of bank notes into reserves as a constituent element therein.

The substance of the work done in conference committee may be summarized somewhat further in order to bring out the points that had been accepted as innovations upon the House bill and those that had been rejected because the changes proposed in them were not deemed wise. Turning first to the alterations in the House bill that secured acceptance, we may enumerate the principal features as follows:

(1) Introduction of provision for sale of stock in federal reserve banks to the public in the event that not enough banks subscribed for the stock to furnish an adequate capital in any given district.

(2) Provision for alternative voting in the choice of directors of federal reserve banks so as to insure prompt election.

(3) Reduction of number of federal reserve banks to not more than 12, as against the "at least 12" of the House bill.

(4) Elimination of requirement that all national banks recharter.

(5) Broadening of powers of Federal Reserve Board and modification of language relating to rediscounts between federal reserve banks, so as to render such rediscounts easier than was intended by the House bill.

(6) Provision that the Secretary of the Treasury might, not must, deposit public funds in reserve banks.

(7) Reduction of reserve requirements placed upon member banks under House bill.

On the other hand, the following important points were yielded by the Senate in the conference:

(1) Omission of provision that holders of stock sold to private individuals (if any) should have voting power in directorates of federal reserve banks and elsewhere.

(2) Elimination of guarantee of bank deposits, by use of surplus earnings.

(3) Elimination of provision that federal reserve bank notes might be counted in reserves of stockholding banks.

(4) Restoration of provision that many classes of checks should be collected at par throughout the country, and that where such par collection was not enforced the charge for making collection should be fixed by the Federal Reserve Board.

(5) Elimination of domestic acceptances, thereby excluding them from use by stockholding banks and from rediscount by federal reserve banks.

(6) Modification of reserve requirements as formulated by the Senate so as to require actual cash reserves in the vaults of country banks (the Senate having entirely dispensed with such reserves after twenty-four months from date of the passage of the act) and general stiffening of reserve requirements made by the Senate, although the final language still constituted a reduction below the House provision.

(7) Reduction of period of maturity for which discountable paper might run.

While many other points of modification and concessions on either side might, of course, be enumerated, it is believed that the foregoing presentation is representative and shows sufficiently well the nature of the conference work and the character of the points conceded on either side. Assuming that such a fair or representative selection has been made, it is evident that the work of the conference resulted in the establishment of the House contentions at nearly every essential point, the exceptions to such a remark being found in two main particulars:

(1) The reduction in the number of reserve banks and their limitation to not more than 12 at any time.

(2) The provision that public deposits might or might not be made in the reserve banks at the discretion of the Secretary of the Treasury.

While other points were significant and important in their way, it can certainly be fairly concluded that on those matters involving important issues of theory the House virtually held its own in most respects. In fact,

it is an accurate generalization that the final bill as completed in conference committee and as passed by both houses was a closer approach to the original House draft of the measure than anything that had intervened during the time the bill was going through the various permutations to which it was subjected in its slow progress from one stage to another of the legislative process.

At one other point there was marked and vital departure from the original House measure—the provision with reference to the refunding of United States 2 per cent bonds and the treatment of the currency based upon such bonds. On this subject the final action of the conference was nearly equivalent to the acceptance of a plan formulated by the administration and designed to take the place of all the various other schemes that had been recommended from different sources in either House.

Sources of the Bill

The Federal Reserve Act is the product of a lengthy course of development and has grown gradually out of the discussion and analysis of the past twenty years. It is not drawn, even largely, from any single source, but is the product of comparison, selection, and refinement upon the various material, ideas, and data, rendered available throughout a long course of study and agitation. Many bills embodying the same general line of thought that now finds expression in the new Act have been offered in Congress; some have been suggested outside that body. The most fundamental concept of all—that of uniting the banks of the country into organized groups—is found in the clearing-house organizations, which in times of stress have pooled their resources and converted bank assets into the equivalent of reserve money. The bills prepared by or under the direction of

Hon. Isidor Straus, Hon. J. H. Walker, Hon. Charles A. Fowler, and Hon. Maurice L. Muhleman have supplied at least the basis for many of the detailed analyses and methods of treatment that are found in the Federal Reserve Act. Earlier than any of these was the bill recommended by the Indianapolis Monetary Commission, which did not provide for co-operative unions of banks, but upon which the framers of the present act have evidently drawn for some of their ideas.

The latest bill in the long series which was available for study to the framers of the Federal Reserve Act, was that prepared for the National Monetary Commission and called in popular language the "Aldrich bill." By many the new law is regarded as a partial copy of, or plagiarism from, the Aldrich bill; and that view has been widely expressed both in and out of Congress. The Aldrich bill provided for a single central "reserve association" with scanty public oversight, with practically all control vested in the banks, and with the preponderance of power in bonds of the larger institutions which owned stock. It so arranged things as to keep this "reserve association" relatively inactive except upon special occasions of panic or disturbance. It made no direct provision for the shifting of reserves in part from existing banks to the proposed associations, but it relied upon inflation due to the placing of bank notes issued by the central association in the reserves of the stockholding banks for protection in time of danger.

The new act provides for from 8 to 12 reserve banks, introduces the principle of local control, calls for strict government oversight, shifts reserves from present correspondent banks to the new institutions, minimizes the influence of the larger banks in directorates, and generally diffuses control instead of centralizing it. It leaves

banking as such to be practiced by bankers; it vests the control of banking in the hands of government officers. The theory and purpose of the new act are widely different from those of the Aldrich bill. Where the Aldrich proposal veers widely away from the tendencies that have been developed during the preceding ten years of American banking discussion, the Federal Reserve Act closely follows them. Indeed, the Act of 1913 is closer to any one of half a dozen bills of former years than to the Aldrich proposal.

From the standpoint of technique, as already noted, the case is quite different. With regard to stock issues, kinds of paper eligible for rediscounts, and not a few other particulars, the Federal Reserve Act follows lines laid down in the measure which bore the name of Senator Aldrich. In fact, the original House bill, for strategic purposes, retained wherever it could safely do so the language of the Aldrich bill as regards banking technique, its framers recognizing that by so doing they enormously reduced the hold of the opposition and immensely contracted the field within which the familiar charges of "unsoundness" could find scope.

Perhaps the most notable and beneficial changes made by the Federal Reserve Act—the transfer of reserves from reserve to central reserve city banks and the provisions for par collection of checks whenever possible—were not mentioned either in the Aldrich bill or in those of its predecessors already referred to. They were not only new elements in the movement but were undoubtedly among the elements in the measure which proved hardest to enact into law. From the beginning, the most strenuous opposition was offered to them, notwithstanding that both features were admitted to be sound in principle. It was, therefore, only after a sharp contest that they suc-

ceeded in gaining a definite foothold, inasmuch as they constituted a new and distinctly distasteful element in the whole legislative proposal.

A review of the detailed provisions of the measure shows, therefore, that, while the conception of banking reform upon which it is founded is the same that has constituted the staple of the banking reform movement of recent years, and while the conception of a union of banks is directly borrowed, as in other bills of the past decade, from the actual practice of the banks themselves as developed under the stress of circumstances in the form of clearing-house organizations; while, moreover, certain phases of the technique of the legislation itself followed the lines of the Aldrich or Monetary Commission bill, and while other portions of the Act have been adapted from well-known legislative proposals that have figured within the past few years of banking discussion, the Act as a whole is based upon a conception and plan entirely its own, applies in many fundamental respects methods of control and administration that have been given at least a new form, and includes several important innovations, not heretofore conspicuous in banking discussion although admittedly significant, not to say necessary to any thorough reorganization upon sound principles. That the Act also contains some elements that may be regarded as reminiscences of the less desirable and more objectionable phases of banking agitation, is equally certain. These are seen in the underlying concept of the federal reserve notes, which are thought of as government currency loaned to banks, and are thus at least theoretically, although not practically, in line with so-called "government currency" schemes of past years. Fundamentally, the system is based upon experience and upon proved workable principles.

TEST QUESTIONS

1. What were the three primary aims of the banking legislation of 1913 as summarized by Chairman Glass?
2. What were the recommendations of the House Committee on Banking and Currency in regard to the kind of currency to be created by the act?
3. What Senate amendments to the House bill were finally adopted? In what respects did they modify the original bill?
4. What important points were yielded by the Senate?
5. What are the main sources of the Federal Reserve Act?
6. How does the Federal Reserve Act differ from the Aldrich bill?
7. What provisions in the Federal Reserve Act are new in the sense that they were not incorporated in any previous proposals?

CHAPTER XVII

CONTROL OF THE FEDERAL RESERVE SYSTEM

The Federal Reserve Board

Governmental supervision of banking is everywhere today accepted as a public necessity. Under the old National Bank Act it was furnished by the comptroller of the currency. Under the Federal Reserve Act a new mechanism for it is supplied by the Federal Reserve Board.

The Federal Reserve Board is the central controlling and directing mechanism of the federal reserve system and, therefore, of the banking system of the United States. Under the terms of the Act it is appointed by the president, by and with the advice and consent of the Senate, subject to the following limitations:

1. No two members of the Board can be chosen from the same district.
2. Each member must have been a bona fide resident of the district from which he is appointed for two years preceding his appointment.
3. Two members of the Board must be men of practical experience in banking and finance.

Subject to these limitations, the president, with the confirmation of the Senate, appoints five persons of his own selection. These, together with the comptroller of the currency and the Secretary of the Treasury, make up the Federal Reserve Board. The Secretary of the Treasury is ex-officio chairman of the Board, but the Board

has always a chief executive officer, known as the governor, and a second executive, similarly named, and known as the vice governor. The Board has power to adopt its own by-laws, rules of operation, and the like, and to select its own place of meeting.

Its functions are lengthy and detailed, but they may be briefly summarized under the following main heads:

1. To select government directors in federal reserve banks and to approve or disapprove the salaries of officers of the banks.

2. To establish rules and regulations for the management of business in the several districts.

3. To review the rate of discount at federal reserve banks and to originate the rate of rediscount between federal reserve banks.

4. To regulate the reserve holdings of the several banks and to impose penalties or fines upon those banks that permit their reserves to fall below the specified limit.

The permanent and regular duties of the Federal Reserve Board outlined above may be considered under three general divisions:

(1) Administrative.
(2) Constructive.
(3) Educative.

Administrative Duties

Administrative functions are essentially of two kinds:

(a) The regular and recurring duties necessary to the operation of the system, and

(b) The sporadic or occasional duties which grow out of the operation of the Act, but which do not occur at any definite time or times.

Of the regular and stated duties of administration, probably the most conspicuous is that of regularly

approving discount rates when they are submitted by the several banks. To do this work intelligently involves careful study and consideration of the general business conditions throughout the nation, of the situation in each of the reserve districts themselves, and of the broad general outlook for the future. An incidental consideration is necessarily that of the earnings of federal reserve banks, and the degree in which it is necessary or desirable to enlarge those earnings through the taking on of more business.

Another administrative function practically continuous in its operation is that of granting to banks power to enlarge their acceptances of paper up to 100 per cent of their capital and surplus, and of extending to them the right to exercise the functions of trustee, executor, administrator, and the like. Under the terms of the Federal Reserve Act these powers can not be conveyed except by special permit, and any member bank which desires to make use of them, must, therefore, obtain the consent of the Board. Under the system which has been laid down by the Board this involves an application first of all to a local federal reserve bank, and when such an application has been approved, the Board is in position to take action, either confirming or disapproving the findings of the federal reserve bank which had passed upon it.

The law requires also that each federal reserve bank shall submit to the Federal Reserve Board statements of compensation paid to officers and directors that they may be approved by the Board. This naturally implies a study of proper rates of compensation, and the taking of action designed to fix such rates when occasion demands. Once established, the salary lists of the federal reserve banks are not likely to show extensive changes, but such

alterations as there are will recur and require attention from time to time.

Other administrative duties must likewise be performed, among them the passing upon and approval of applications for and surrender of capital stock in federal reserve banks, the holdings of the member banks varying according as their own capitals and surpluses increase and decrease. These, however, are for the most part technical, and no further enumeration is necessary.

Constructive Duties

The constructive duties of the Board prescribed by law are seen to best advantage in the provision which calls for the development and application of regulations designed to control methods of business. Since the Board was organized it has issued regulations defining commercial paper eligible for discount, regulations relating to the definition of savings accounts, rules for the issue and retirement of capital stock, rules for the purchase of warrants and bankers' acceptances in the open market, and a variety of others.

These regulations govern the practices of the federal reserve banks, and have substantially the force of law, inasmuch as the Federal Reserve Act itself calls for the exercise of these functions subject to the rules made by the Board. Inasmuch as the character of the rules and regulations thus made may gradually alter the scope and methods of business done by the banks, it is clear that the work of the Board in this regard is in the highest degree constructive in its nature. At times it is almost equal to the extensive limitation or modification of the provisions of the law itself.

It is difficult to say how far, when the system is fully perfected, it will be necessary for the Board to work on

such regulations. A reasonable expectation would seem to be that after the lapse of a moderate period of time, the banks would become fully possessed of their reserve holdings, while their experience would also have demonstrated the lines along which they must work in the performance of their business. When such experience has been accumulated, and the system has definitely been set in working order, it may be expected that the regulations of the Board will be changed but little, and that any modifications will be the outcome of observation and experience of banking and business conditions throughout the nation. By changes in the discount rate, the volume of business will be controlled; but the methods of business at the banks, which are dependent upon the regulations aforesaid, will not be greatly altered. At present the federal reserve system is still in process of development, and its business practices are being worked out. This has necessitated more or less frequent changes in regulations, but such changes, as already indicated, will diminish in number as time goes on.

The Act has also placed in the hands of the Federal Reserve Board the power of changing and readjusting the reserve districts, subject to the broad general requirements that there should not be less than eight nor more than twelve. How extensive such readjustments of the districts will be, experience must show; and when the time comes to make them, an important constructive function of the Board will be that of determining when and how they shall be introduced. Already the Board has granted a few petitions for readjustment of boundary lines between districts.

Of the same general character is the provision of the Act which calls for the establishment of branches, and which practically invests the Board with the authority

to oversee the establishment of such branches of federal reserve banks. Plainly the operation of the law in this particular will mean that the broadest use and development of the system and its branches, the establishment of agencies abroad, and other functions of the same general description, will be intrusted to the Board, and will constitute one of its most important duties of a constructive nature.

Educative Functions

Among the implied or educative duties of the Board is undoubtedly that of bringing about general and harmonious action among the several districts and of welding the different parts into a consistent, united whole. In order to do its work well, the Board must necessarily be in close touch with the several districts and know what is going on in them, and with this purpose in view, direct communication with the different districts has been intrusted to the several members of the Board in order that they may keep themselves and their colleagues advised of any developments in these districts which call for special attention.

An annual report to Congress was required by law and must be formulated by the Board. It was also intrusted with the duty of keeping the country advised of the condition of the system. It has undertaken to carry out this duty in part by the establishment of a publication known as the Federal Reserve Bulletin in which are collected notices and statements about the work undertaken and the results accomplished in the operation of the system. Much more might be said of the detailed work of the Board in the task of educating the public to a knowledge of its operations and of standardizing banking practices, but the statements already

made practically cover the ground in its most essential aspects.

Organization of the Board

The Federal Reserve Act imposes practically no limitations upon the methods by which the Board performs its own work. In accordance with the provision of the law which authorizes the Secretary of the Treasury to provide quarters for the Board in his Department, the main offices at Washington have been located in the Treasury Building. While there is no rigid practice, it has been customary to hold meetings from three to five times a week, usually each day, although during the period of organization two meetings a day were not uncommon.

A set of by-laws defining the organization of the Board was early adopted, and these provide for an Executive Committee whose function it is to transact all necessary business not involving any new departures of policy. When the members of the Board are practically all present in Washington, stated meetings on Monday, Wednesday, and Friday, with Executive Committee meetings on Tuesday and Thursday, are the rule, while other committees may meet occasionally as convenience dictates. Sessions of the Board are held in private, and thus far no public sessions, with the exception of the hearings on appeals from decisions of the Reserve Bank Organization Committee, have been appointed.

When a decision has been arrived at with reference to a proposed change in the discount rate, or the adoption of any new policy or method of business, the federal reserve agents are at once advised by telegraph or letter, and then the decision is communicated to the various federal reserve banks. The federal reserve agent is regarded by the Board as its representative on the

ground, and, as such, the official medium of communication between it and the bank to which he is accredited; although the Board may, and frequently does, hold direct communication with the governor of the federal reserve bank as being the active operating officer.

Comptroller of the Currency

The comptroller of the currency is a member of the Federal Reserve Board. The Federal Reserve Act did not change his previous function as chief of the national banking system, or his responsibility to the Secretary of the Treasury and to Congress. These relationships, therefore, continue, and his presence on the Board simply serves to establish a connecting link between the supervision of the national banking system as such, and the general supervision of the federal reserve system, including federal reserve banks and such non-national banks as may have become members.

Secretary of the Treasury

In the same way the Secretary of the Treasury's membership in the Board in no way alters his other relationships or duties. The fact that he presides over the Board enables him to communicate to it necessary information with reference to the policies of the Treasury Department on financial and banking questions, and to receive from it advice and information concerning the work of the reserve system.

Under the Federal Reserve Act the placing of public deposits in the reserve banks is left entirely in the hands of the Secretary of the Treasury, although the Act distinctly contemplates that such deposits shall be made and that the reserve banks shall ultimately assume that function as agents of the Government. When that step shall

have been taken, the membership of the Secretary of the Treasury on the Federal Reserve Board will have an increasingly direct practical importance by creating an effective communication between the revenue department of the United States Government and the banks as holders of the funds. The membership of the Secretary of the Treasury in the Federal Reserve Board will, under those conditions, be much more than merely formal, and will include much more than the mere rendering of advice and suggestions. It will of necessity be a practical working participation on the part of the Secretary of the Treasury in the affairs of the Board and, conversely, a participation on the part of the Board as a conservator of the banking resources of the country in the operation of one set of the activities of the Treasury Department.

Bureau of Audit and Examination

In organizing its staff at Washington for the performance of the duties already enumerated and others incidental to them, the Federal Reserve Board found it desirable to recognize several distinct divisions. The task of examining member banks (not national) and of making periodic examinations of federal reserve banks, has been committed to a distinct bureau or division known as the Bureau of Audit and Examination, headed by a chief under whom is organized a small corps of examiners and assistant examiners. The task of examining the twelve federal reserve banks would not in itself be a heavy one, but as state banks enter the system, the duty of ascertaining whether they are in suitable condition for admission, and of making sure that they continue to be so, will involve a considerable amount of labor.

Division of Reports and Statistics

Another of the main divisions into which the Board's work is divided is that of Reports and Statistics. When the Federal Reserve Act was drawn, provision was made for a weekly report of the condition of all federal reserve banks and of each bank, showing the main items in their accounts. This is prepared in the Division of Reports and Statistics from data which are weekly telegraphed to the Board and are combined to make up the final statements. Provision was also made when the federal reserve banks were organized for regular reports by the several banks of paper purchased, with name of purchaser, maturity, rate, etc. Complete lists showing all these items of information, and giving data as to the daily condition of the several banks, are daily forwarded to Washington by each one of the institutions. It is the duty of the Division of Reports and Statistics to combine and analyze them and to prepare the result of the study in such form for examination by members of the Board as will aid them in forming conclusions regarding the business of member banks, as indicating necessary changes in rates of discount, and as otherwise determining the policy to be pursued in the general conduct of the banking system.

Division of Clearing

In the Federal Reserve Act it was specified that each federal reserve bank might act as a clearing house for its members, but that the Federal Reserve Board might act as a clearing house for the federal reserve banks, or might designate one of the federal reserve banks thus to act. In pursuance of this authority, the Board has established a division of clearing in Washington for the

purpose of settling balances between federal reserve banks without the actual shipment of coin. This division is in charge of a fund of about $125,000,000 in gold, and conducts a set of books on which are recorded from week to week credits and debits between federal reserve banks arising out of their operations during the week. As given banks are credited or debited on these books, the amount of their ownership in the Gold Fund changes.

Supervision of Reserve Banks

Federal reserve banks which are under special obligations and duties are not only closely supervised by, but in fact operated under, close government supervision. Two features deserve to be specially noted in this connection:

1. Owing to its close relation with the government each federal reserve bank has a special officer representing the government, who is chairman of its Board of Directors and who is designated as "federal reserve agent."
2. Every federal reserve bank confines its discount business to other banks, a fact which at once alters the type of organization of the institution in some important particulars.

Board of Directors

The fundamental control of the federal reserve bank is in the hands of the Board of Directors, consisting of nine members. This Board of Directors consists of three classes, each containing three members and each class being designated by a letter, as A, B, and C. Class C directors are nominated by and represent the government. Class B directors are business men not engaged in banking who are presumed to represent in a general

way the industrial, commercial, and agricultural interests of the district in which the bank is situated. Class A directors are directly representative of the banks.

Both Class A and Class B directors are chosen by the banks, and for the purpose of this selection, the banks in each district are divided into three groups. Group one chooses one Class A and one Class B director, group two the same number, and group three the same. In group one, the voters or electors are the banks of large capitalization, in group two those of medium capitalization, and in group three the small banks. The chairman of each board of directors divides the banks of the district into these three groups in such a way as to place an approximately equal number of banks in each. Each bank has one vote, irrespective of its size. The group division, however, prevents the small banks from electing men who represent them exclusively and insures approximately equal representation to banks of somewhat smaller size. The directors in question are appointed for equal terms of three years each, but these terms are so arranged that two directors go out of office each year, thus insuring opportunity for rotation.

The chairman of the Board of Directors is designated by the government and is the federal reserve agent of the bank. A vice chairman, with the title of deputy federal reserve agent, is also designated by the government. These two officers are of the number of Class C directors. The remaining Class C director, sometimes described as the "unattached" director, has no specific functions other than those assigned to any director of the bank.

Federal Reserve Agent

Reference has already been made to the federal reserve agent. As chairman of the Board of Directors, his

function is to preside over meetings of the Board, and in general to perform all those functions of organization which ordinarily fall to the chairman of a deliberative body. As representative of the government in his capacity of federal reserve agent as such, he communicates with the Federal Reserve Board and transmits communications from that body to the bank. He also acts in a fiduciary capacity, receiving from the Board at Washington the notes ready for circulation in such amounts as the bank deems to be necessary, and issuing or transferring these to the bank whenever the institution has placed with him, for the special protection of such notes, commercial paper of the kinds specified in the Federal Reserve Act as eligible for rediscount. It is his duty to report regularly to the Federal Reserve Board upon prevailing banking and commercial conditions in his district and to inform the Board of any special or unusual conditions demanding attention from the governing body.

An important function which falls to the federal reserve agent is that of advising the Board, whenever necessary, that the bank desires to change the rate of discount on commercial paper. If such application for change is approved, the reserve agent notifies his bank and announces the rates thus newly fixed to the public. Beyond these definite and well-recognized functions, the duties of federal reserve agent vary somewhat from bank to bank, according to the personality of the agent himself.

The Federal Advisory Council

The Federal Reserve Act creates an Advisory Council consisting of as many members as there are federal reserve districts. It directs the Board of Directors of each federal reserve bank to select annually from its own district one member of this Council. The Council

shall meet at least four times a year at Washington, D. C., and oftener if called by the Federal Reserve Board. The Council at its own discretion may hold additional meetings at Washington or elsewhere.

The Council is, as its name implies, simply an advisory body which confers directly with the Federal Reserve Board on general business conditions and may call for information or make recommendations concerning federal reserve banking operations to the Federal Reserve Board.

TEST QUESTIONS

1. In what body is the administrative control of the federal reserve system lodged?
2. How is the Federal Reserve Board constituted?
3. What are the main functions and powers of the Federal Reserve Board?
4. What are the chief administrative duties of the Board?
5. What are the constructive duties of the Board? Show by a concrete example.
6. How does the Board exercise its educative functions?
7. What is the position of the comptroller of the currency on the Board? The Secretary of the Treasury?
8. What are the duties of the Bureau of Audit and Examination?
9. What are the duties of the Division of Reports and Statistics?
10. What are the duties of the Division of Clearing?
11. Explain the manner in which federal reserve banks are governed.
12. Explain in detail how the directors of a federal reserve bank are chosen.
13. How is the federal reserve agent for each bank appointed? What are his duties?
14. Explain the organization and functions of the Federal Advisory Council.

CHAPTER XVIII

GOVERNMENT FINANCES AND THE RESERVE SYSTEM

For many years past the essential relations between the government and the banks have been a matter of public discussion and controversy. During the early days immediately after the founding of the United States, the view that close relations should be maintained between the government and a great central bank which should hold the public funds, receive, and disburse them, was the accepted theory. It was on this basis that the First Bank of the United States was founded. There was always opposition to and doubt concerning the validity of this theory, and after the twenty-year charter granted by the government of the United States had expired, the government went back to the plan of placing its funds with the many small banks of the states. This proved unsatisfactory, and the breakdown of the system was in large part responsible for the restoration of the old method, the Second Bank of the United States being chartered largely for the purpose of handling the government's finances.

The Independent Treasury

When this institution had been dis-established in 1837 (owing to the political controversies which raged around its management), the old unsatisfactory plan of depositing with state banks was resumed and was found to be as faulty as ever. Heavy losses to the government and great

inflation ensued, and ultimately the so-called "independent treasury system" was brought into existence. The theory of the independent treasury system has been that the government should receive only actual money, and that it should hold such money in strong places of its own, paying out actual money to its creditors.

This system proved untenable at the opening of the Civil War when a paper currency issue had become necessary. Not only did the sub-treasuries have to receive the government legal-tender notes, but they shortly came to receive national bank notes, and to make disbursements not only in cash but in paper. Moreover, during the Civil War it was necessary to make large use of banking machinery, and the system was soon developed of making deposits in banks with special protection in the form of government bonds deposited with the Treasury of the United States. That is to say, if the government needed to deposit funds in banks in order to obtain banking facilities in transmitting money, or for any other purpose, it was with the understanding that the bank receiving such funds would place an equal amount in government bonds with the Treasury of the United States in trust. Then if the depository bank failed, the government was protected because it held an equal amount in its own bonds.

The independent treasury plan as thus modified, was never satisfactory, but it was possible to operate it without serious suffering during the twenty years after the close of the Civil War. At the expiration of that length of time, however, new conditions had developed. It was found that very large sums of money tended to accumulate in the Treasury because the system of taxation produced much more income than the government was disposed at that time to expend. The alternative

was thus presented of either keeping the actual cash in the vaults of the Treasury inactive, or else of placing it more or less permanently on deposit with the banks. It was, of course, possible to use some portion of the funds in reducing public indebtedness by purchasing such bonds as had reached their maturity; but the efforts that were made in this direction during the years 1880-1890 tended to raise the premium on government bonds to an abnormal figure, so that it was soon seen that there was a very easily reached limit to such operations.

Even at that comparatively early date it was, moreover, recognized that as the national banks became more numerous and consequently required more and more bonds as a condition of their organization and to protect their currency; and as the government's surplus deposited in banks became larger and larger, thus requiring more and more government bonds deposited in trust to protect it, there might be a time when the available supply of government bonds would be exhausted, and when, consequently, neither expansion of bank notes nor enlargement of public deposits in the banks would be feasible.

The period of deficit financiering after 1890, due to the tariff legislation of that year, removed all further trouble originating with the Treasury surplus, and it was not until later years of the decade of 1890-1900 that the difficulty again became serious. After 1900 a large surplus again developed, and as in former years it was necessary to dispose of it by depositing it in the banks.

The withdrawal of so much money from circulation would have had a tendency to cramp the available fluid resources of the country, and to limit bank accommodation by a corresponding amount. In pursuance of the effort to distribute the surplus funds of the

government as wisely as possible, the number of depository banks was very greatly increased, rising at one time—about 1904—to something like 1,400. The deposits were distributed without much regard to the legitimate claims of business, and largely upon the basis of sectional or other favoritism.

When the panic of 1907 came on, the surplus funds of the government were very widely diffused; and so great a quantity of bonds had been absorbed in order to protect the deposits in banks, that the immediate expansion of the national bank-note currency to meet the needs of the sudden stringency was very difficult. This experience emphasized the defects of the independent treasury system, and gave point to the belief expressed by students of the situation for many years past that there should be an entire change in this method of handling public funds.

Defects of the Independent Treasury System

The harm of the independent treasury plan is twofold; the system is not wise or economical, and does not make use of well-known modern methods in handling funds; it, furthermore, is injurious to the financial structure of the country, and at times interferes seriously with the ordinary operations of business and finance.

The second of these considerations may be discussed first. When the taxpayers make payment to the government the result is ultimately to transfer to the Treasury an equivalent amount of actual money. This money, of course, must come out of the cash which is in circulation in the pockets of the people; but inasmuch as under given circumstances the amount needed for circulation purposes is practically fixed, the funds really come out of the vaults of the banks, and, in a corresponding degree,

reduce the stock of money in the banks. By reducing the bank reserves, such payments to the government consequently reduce the supply of loanable funds because they limit the power of the banks to lend to the government in exactly the proportion that the reserves required of the banks bear to their outstanding obligations. Thus, for example, if at any given time a bank has outstanding, say, $6 or $7 of liabilities for every $1 that it has in its vaults, the withdrawal of $1 from the vaults means the probable cancellation of $6 or $7 in credits. The withdrawal of $100,000,000 from the vaults of the bank and its payment to the government in cash, means that $600,000,000 or $700,000,000 of possible lending power has been taken from the bank.

When the surplus reaches very large sums, therefore, it may operate to reduce the stock of cash available for bank reserves in a very material degree. The surplus has sometimes for long periods run from $200,000,000 to $250,000,000. To place so great a sum in the vaults of the government has precisely the same effect as if the individual had hoarded it. The money so withdrawn could not be used for any purpose. Even if the country, recognizing the probability of such a withdrawal, provided itself with the money it needed from abroad, it nevertheless lost the interest on the sums so tied up in the vaults of the government.

The real trouble, however, resulted from the fact that the public could not anticipate, as a rule, such a withdrawal. It could not predict with accuracy the conditions under which a surplus or a deficit would be created. Frequently, indeed usually, the withdrawal took place at the very time when the need of money for the purpose of supporting bank loans was greatest. It is evident why this should have been the case. Government revenues

are largest under prosperous conditions, as a rule; and prosperity usually co-exists with severe demands on the banks for loans for the maintenance of business. The treasury system was thus entirely out of harmony with business needs.

The converse of this proposition, moreover, is equally true. If the government, recognizing the difficulties of the case, and knowing that harm was practically certain to result from the withdrawal of funds in large amounts, sought to relieve the situation by redepositing such funds, then it could very seldom overcome the harm done by withdrawal. To select banks as depositories in such a way as to redeposit the funds in practically the same manner in which they were originally withdrawn, would be nearly out of the question; and the result of the distribution of funds on any other principle was likely to cause harm. For example, if $50,000,000 of excess revenue was taken in at the port of New York for customs duties, and was then deposited in, say, fifty banks in the Middle West, the effect would be to withdraw the money at those points where it was needed by business, and to place it at other points where it might or might not be needed.

The same situation exists in internal revenue. If, for example, $25,000,000 of whiskey taxes was received at Peoria, Illinois, and not being needed for immediate disbursement, was deposited in banks on the Pacific Coast the same injurious result would be produced as in the former instance. It might be said that the difficulty would be overcome if the funds were redeposited at the same places at which they were withdrawn, namely, in our illustration, at New York and Peoria. This is only partially true; but even assuming that the assumption was wholly correct, such deposits would be practically

out of the question from a political standpoint. As a matter of fact the government system of depositing funds in banks has never been satisfactory under any administration, and has never met the needs of the business world. The consequent withdrawal and redepositing of surpluses has been one of the most injurious financial factors with which the country has had to contend.

It has already been stated that another consideration against the independent treasury system was that it failed to give the government the advantage of up-to-date and economical methods of banking and transfer of funds. Under the independent treasury system such banking methods have been supplied only in a very limited and unsatisfactory degree. The sub-treasuries have exercised some banking functions, transferring money by telegraph, and otherwise avoiding shipments of coin. Banks have been made use of under extraordinary restrictions as checking agents. In the main, however, the effort of the government has been to avoid the payment and receipt of funds through regular banking channels, and to do as much of its work as it could through its own machinery in the independent treasuries. Although these treasuries have been permitted to become members of local clearing houses, so that they could collect checks on banks, and although individual taxpayers have been permitted to make payments in certified checks on banks and otherwise, the practice has always been exceedingly slow, uncertain, and unsatisfactory, largely because the sub-treasuries were not banks, had no regular banking connections, and could not, in the nature of the case, do the work of the banks.

Government Banking in Foreign Countries

In foreign countries the case is quite different. There the banking institutions which act as agents for their

respective governments are often collectors of taxes, receiving payment in ordinary bank checks, carrying them to the government's credit, and in the same way making payments for the government in their own funds, the balances of the government being carried on the books of the banks like any others, and, consequently, not operating to interfere at all with the general use of the bank's resources by the business world.

The service thus rendered by foreign banks has at all times been useful and economical; but its value has been more evident on those occasions when large accommodations were needed by foreign governments. On such occasions loans have been obtained either directly from such banks, or, through their agencies, from individuals and corporations. The United States has had no such resources, but has been obliged to rely upon the sale of bonds by popular subscription, a plan which works sufficiently well when conditions are undisturbed, but which is in grave danger of breaking down at any time of stress or difficulty when the public at large is doubtful of the future or is suffering curtailment of its income.

In times of difficulty, therefore, it is necessary to have the assistance of some responsible institution whose direct duty it is to act from a public and patriotic standpoint, for the purpose of insuring the stability and efficiency of the financial structure of the country. No bank organized as a purely private institution is likely to fulfil this function satisfactorily, even though it may be managed with a very considerable degree of public spirit. Its first duty, after all, is to its customers and stockholders, and the managers of the institution must bear that fact constantly in mind in framing their policy. There have fortunately been but few occasions since the close of the Civil War when it was necessary for the gov-

ernment to rely largely upon loans, or to make appeal to private institutions. On those few occasions, however, the need of some more effective organization has been keenly felt, and this recognition of the necessities of the case has added to the general demand expressed by scientific students for the revision or abandonment of the independent treasury system, so as to introduce a plan of financial management that would be in harmony with modern practice.

The Reserve System and Fiscal Management

The Federal Reserve Act, in view of the foregoing considerations, endeavors to effect two distinct changes in the existing relations between the government and the reserve institutions:

(1) It provides for the depositing of government funds in federal reserve banks, which are authorized to act as "fiscal agents."

(2) It authorizes federal reserve banks to deal in government securities.

This, in short, authorizes the government to become a depositor at federal reserve banks in common with the various member banks of the country, and through the provision that the reserve banks may trade in government securities (while acting as fiscal agent), it practically enables the government to resort to the banks for accommodation should it desire to do so. In one very special way an important relationship is established between the government and the federal reserve banks.

Provision is made, as has been seen, in connection with our treatment of the currency question, for the gradual transfer at a rate not exceeding $25,000,000 per annum, of the national bonds now held by the national banks, to the federal reserve banks. The reason for introducing

this provision is found in the fact that in order to introduce an improved currency situation, it was necessary to deprive the national banks of their exclusive power of issuing notes based on government bonds. This, of course, meant that in all equity, the banks must, at some reasonable time, be relieved of their bonds at a fair figure. The federal reserve banks, by taking over these bonds, gradually mass the securities in their own hands, and consequently relieve their individual members who have disposed of their securities. Ultimately it may be assumed that the bonds will be refunded, or otherwise provided for by the government of the United States upon some satisfactory basis; but this must be regarded as a step that will probably be a good while deferred.

Acting upon the authority conveyed by the Reserve Act, the Secretary of the Treasury on November 22, 1915, named the reserve banks' fiscal agents from and after January, 1916. He had already made special deposits in three of the banks. It will be some time, however, before all government funds are thus shifted, and no arrangements have been made for that purpose. One reason for the postponement of final action has been that since the organization of the banks there has been little withdrawal of cash from circulation as a result of payments to the government. The expenses of the government have been more than equal to its incomes; and what has come in has gone out as rapidly as it was paid in to the Treasury. Moreover, great ease of money and very large surplus reserves have been established throughout the country as a result of the reserve changes incident to the adoption of the Federal Reserve Act. Another reason for the postponement of complete transfer has been that the duty of acting as fiscal agent will entail considerable expense upon the reserve banks, and is a function that will require some detailed preparation. Altogether, therefore, it has

been felt that no serious harm would result from some delay.

The fact remains that the Federal Reserve Act has provided what has long been urged, and has, at times, been most urgently needed—a means of keeping the funds of the government itself with a mechanism for placing and receiving money, which does not depend upon the available supply of government bonds. Equally important with this is the fact that an efficient financial mechanism, under close government supervision, and in equally close touch with the general banking system of the country, has been provided for the use of the government in the event that any emergency requiring the placing of large loans in behalf of the public treasury, should present itself.

TEST QUESTIONS

1. Through what different agencies did the federal government handle its treasury funds up to the time that the independent treasury system was adopted?
2. What were some of the lessons to be derived from this experience?
3. What were the essential features of the independent treasury system?
4. Why did the system work fairly satisfactorily when governmental receipts were equal to or less than expenditures, but fall down when receipts greatly exceeded expenditures?
5. What were the objections to redepositing excessive surplus funds with banks?
6. How did the independent treasury system deprive the government itself of efficient banking services?
7. What systems of government banking prevail in foreign countries?
8. What two changes in the independent treasury system does the Federal Reserve Act make possible?

CHAPTER XIX

THE FEDERAL RESERVE SYSTEM IN OPERATION

System

The reserve banks are as we have seen co-operative institutions, carried on for the benefit of the community and of the banks themselves by the banks acting as stockholders therein. They have an active capital equal to 6 per cent of the capital and surplus of existing banks which may take stock in the new enterprise.

Regional Character of Banks

It will be observed that in what has just been said the reserve banks have been spoken of as if they were a unit. They are, however, individually organized and individually controlled, each holding the fluid funds of the region in which it is organized and each ordinarily dependent upon no other part of the country for assistance. The only factor of centralization which has been provided in the new Act is found in the Federal Reserve Board, which is as noted a strictly government organization created for the purpose of inspecting existing banking institutions and of regulating relationships between federal reserve banks and between them and the government itself. Local control of banking, local application of resources to necessities, combined with federal supervision, and limited by federal authority to compel the joint application of bank resources to the relief of dan-

gerous or stringent conditions in any locality are the characteristic features of the new plan.

The limitations upon business and the maintenance of all operations upon a footing of relatively short time keep the assets of the proposed institutions in a strictly fluid and available condition. They insure the presence of the means of accommodation when member banks apply for loans to enable them to extend to their clients larger degrees of assistance in business. The government retains sufficient power over the reserve banks to enable it to exercise a directing authority when necessary to do so, but it in no way attempts to carry on through its own mechanism the routine operations of banking which require detailed knowledge of local and individual credit and which determine the actual use of the funds of the community in any given instance.

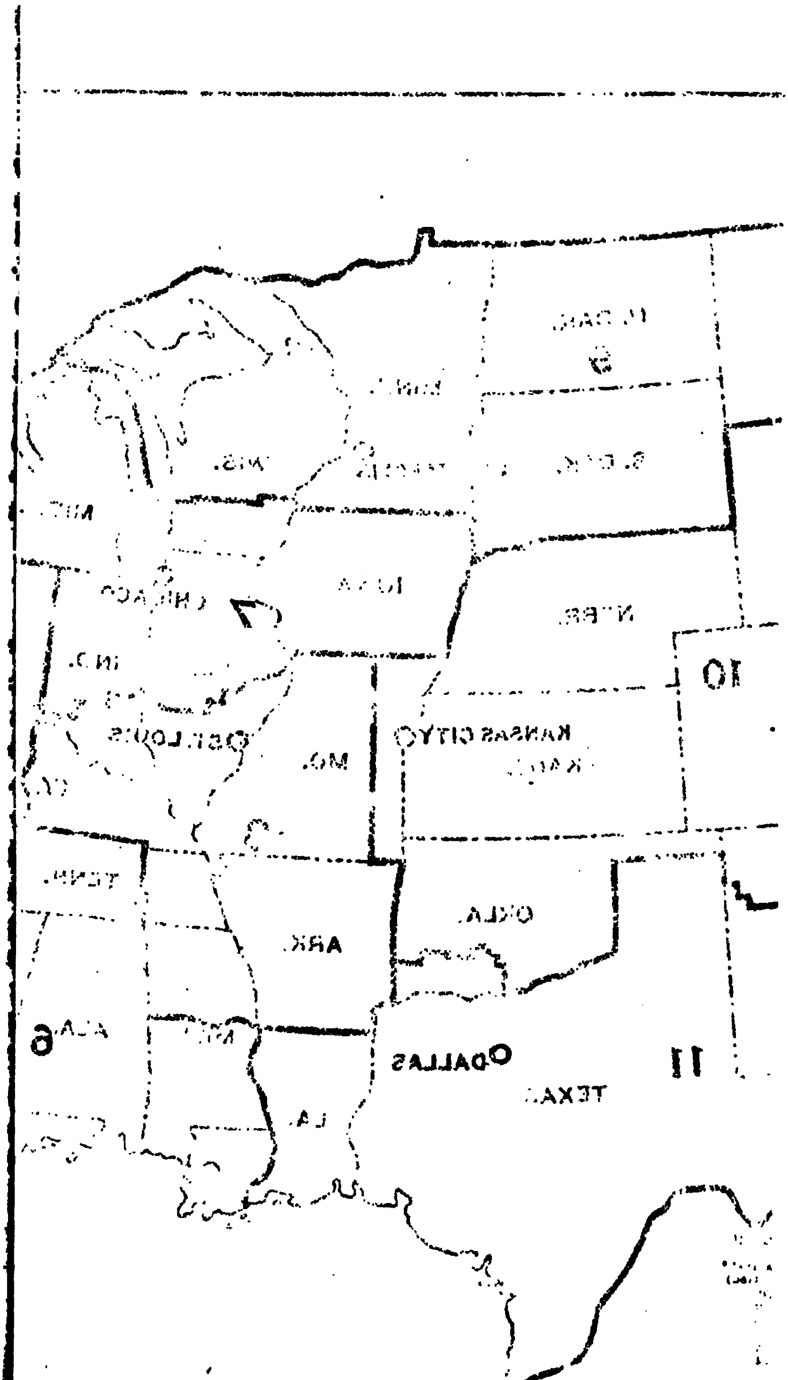
It is this feature of the federal reserve system which has aroused most criticism from those who were opposed to it—its so-called regional character—that is to say, the fact that an effort has been made to establish independent institutions in different sections of the country. This has been represented as an innovation without merit. In support of that contention it has been pointed out that in no other banking systems is any heed paid to geographical divisions, but the central reserve-holding and note-issuing bank of each nation is given power to go on extending its operations as it deems best and welding the banking resources of the country as a whole into one.

Somewhat further examination of the proposition, however, shows that the federal reserve system with its series of independent banks is not so different from this "European" plan as has been thought by some. The area of the United States is about equal to that of Europe,

including Great Britain and European Russia. So far as area is concerned, then, there would be room in the United States for a number of institutions corresponding to the total number of central banks throughout the European continent. The mere fact that international lines divide the Bank of France from the Bank of England or the Bank of Germany, has no relation to the economics of the situation. It is a fact that no such extent of territory as the United States is dealt with by one single central bank.

The federal reserve system with its series of reserve holding institutions, therefore, does in fact correspond much more nearly to European practice than a single central institution with branches would have done. Each federal reserve bank includes within its district a territory which, as the nation expands and its business increases, will rank with the territory tributary to one of the European central institutions. By establishing a Federal Reserve Board, vested with power to harmonize and unify the operations of the federal reserve banks, the federal reserve system goes a step further than the European central banking systems, inasmuch as it provides for a joint and co-operative control of the credit situation.

The inclusion of a large proportion of commercial banks is, however, necessary, because of the necessity of making the institutions sufficiently strong to be effective. Consequently, national banks are required to enter the system under penalty of being obliged to go into liquidation and surrender their charters. It was seen, however, from the time the Federal Reserve Act was first proposed, that the limitation of the system to national banks might not be a good thing. If state banks continue to be as numerous and as powerful as at present, and to include



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IOWA
NEBR.
KANSAS CITY
MO.
ST. LOUIS
ARK.
OKLA.
DALLAS
TEXAS
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other items originating within the respective districts, and requiring to be cleared on the books of the banks.

From the standpoint of structure or organization, therefore, it may be expected that in the near future a series of branch institutions will develop. Only one such branch has as yet been provided for, and it is still uncertain whether in creating a branch within a given district, an independent territory will always be assigned to such a branch, or whether it would be permitted to do business with any member bank throughout the district which may choose to resort to it rather than go to the head office of the parent institution. The branch already created (at New Orleans) has, however, been given a separate territory of its own.

There are some questions connected with this situation that may turn out decidedly interesting. If a number of branches should be established in any given district, the natural result would seem to be either that the federal reserve bank of the district would become a central office, taking charge of their affairs in general, and overseeing them (but probably not doing much business itself, the actual work being done at the branches), or else that it would practically assume a status co-ordinate with that of its own branches. Indeed, if in some districts it should happen that branches were more successful in directing business to themselves, while the parent institution had perhaps been erroneously located in the first instance, the latter might be placed in an embarrassing situation, because of the fact that its subordinate branches were getting more actual business than the home office. All this is a question which must be determined largely on the basis of experience. There are no definite canons of theory and certainly no provision in the Act itself that would control the disposition of such issues.

Broad Principles of the Plan

It is now necessary to devote some attention to the new legislation from the broad general standpoint and to note the significance of the measure as it finally became law. To the student of banking it need hardly be said that the striking aspects of the legislation are these three:

(1) The creation of a general discount market for commercial paper.

(2) The systematic pooling of reserves of existing banks.

(3) The provision of an elastic currency.

In the multitude of details provided by the legislation, and in the various adjustments rendered necessary by it with respect to government deposits, bank reserves, examinations, and other more or less important matter, it is noticeable throughout that everything done has been for the purpose of promoting the objects already enumerated, and of insuring the transformation of American banking from its present basis of organization to a proposed new one. If these chief objects shall be accomplished in actual practice, the legislation will have been amply warranted, and, it need hardly be said to a professional reader, will completely revolutionize the banking and credit situation, to the great profit not only of the banks themselves but of their customers. That the banks will greatly profit under the bill is susceptible of easy mathematical demonstration. That the business public will profit in a far higher degree than the banks is less obvious, but is a fact which constitutes the chief basis for the legislation. Were it not true, the time and effort expended in securing the present result would scarcely have been warranted. In its real essence, the

new law is in fact and in the best sense of the term a "business man's measure."

Heretofore, American banking has been too largely an agency in the service of speculation. This statement is borne out by the following considerations:

(1) The rates controlling the flow of gold out of the United States have been those dictated by the call-loan market, not those prevailing in the commercial discount market.

(2) The funds which the banks desired to have ready to hand have been customarily invested in demand loans on stocks rather than in quick commercial paper or short-term foreign exchange.

(3) In times of crisis or pressure, the banks have shortened loans in this country instead of, as in foreign countries, enlarging them to accommodate legitimate borrowers. If they have undergone sacrifice, it has been for the primary purpose of upholding and safeguarding the stock market.

The new Act changes this condition in the following ways:

(1) It transfers a small but necessary fraction of the ultimate reserve money of the country to government-inspected institutions, located in various parts of the country, where they will be quickly responsive to, and in sympathy with, business necessities, and prescribes by rigid rules that these funds shall be applied solely to commercial needs and to nothing else, since the loans that may be made by these new banks are narrowly restricted in term and in character.

(2) It broadens the methods of doing business allowed to national banks, so far as relates to investments in legitimate commercial paper, and narrows them corre-

spondingly, so far as relates to investments in stocks and bonds.

(3) It increases the loaning power of the banks of a given community, and promises to such banks, when in need of assistance, the support which will be derived from the combined resources of their fellow banks in the same community or region.

Its effort is thus to promote the growth of commercial credit and to protect that credit when brought into existence. It differs from the present law, in that it refuses longer to look upon the business man as one who "borrows money" at a bank, and regards him as one who manufactures a commodity—commercial credit and the paper representing it—which he sells to banks, and which it is the f[illegible] [illegible]e latter to insure and to keep liquid. [illegible] f the bank as being, above all things [illegible] ning specie payments and sustain[illegible] the community; and it declines to [illegible] as one whose duty it is to promote [illegible] ues of securities, or aid in stock [illegible] these phases of financial effort have [illegible] le place when properly defined and [illegible] fully concedes, but it holds in prin[illegible] is not found in connection with the [illegible] anks.

[illegible] r in Aid of Business

[illegible] munity contents itself with simply [illegible] nt methods of operation, it will derive great advantage from the law. It will find: (1) that local banks will be able, by rediscounting the paper of local enterprises, to provide the funds needed by such enterprises in their operations; (2) that there will be no such wide fluctuations of interest rates either geo-

graphically or from season to season as now exist; (3) that there will be no necessity of emergency measures to safeguard the country from the possible results of financial panic or stringency. Credit will be more simply available, cheaper, and more equitably open to all.

Not the least advantage to the business man will be found in the provisions with respect to bank examinations; since through these, it may be hoped, many operations which have been the disgrace of American banking in the past will be early detected and corrected before they have had time to eat out the heart of institutions which might otherwise have continued sound and solvent. This is equivalent to saying that, under the new law, credit, even if there be no change in business methods, will be cheaper and more evenly diffused, as well as more steady and more certainly to be counted upon by those who do business by acceptable methods.

But the community will not gain the greatest advantage from the measure if it adheres merely to established types of operation. The new Act provides for the creation of a true discount market, such as has existed for many years in every European country. This means that every merchant of established local credit may in the future count upon a free sale for his paper throughout the reserve district in which he is situated, and to a somewhat lesser degree generally throughout the country. The rediscount principle, when fully worked out, taken in connection with the use of the acceptance system, will enable the sound, even though small, manufacturer or trader to get the advantage of the best rates of commercial credit that prevail anywhere within his region of the country. If there is capital to spare—unemployed and seeking occupation—he may expect that, through the general sale of bills under the new system, such capital

will be available for the purchase of his paper and will be so employed. By the judicious use of the acceptance, the local bank will be enabled to facilitate the movement of goods into and out of the country, and will at once make the utmost of its own capital and at the same time enable its clients to gain the widest employment for their own resources. The net result of these various influences should be:

(1) Considerable reduction in average rates of interest on commercial paper throughout the United States.

(2) Very great reductions in the rates in certain sections remote from commercial centers.

(3) Stability and certainty in distribution of credit.

(4) Creation of new and more convenient types of paper.

Reduced Collection Charges

Not the least important of the provisions of the new measure is that which assures to the business man the cheaper collection and transmission of his funds. The Act provides for the deposit of many classes of checks and drafts at par with federal reserve banks, and it thereby aims to establish a parity of exchange among banks within every federal reserve district and then between the federal reserve banks themselves. It permits charges to be made by member banks that correspond to the actual cost to them of collecting funds for their clients, but it places these charges under federal control and specifically authorizes the Federal Reserve Board to restrict them by rule.

This is as it should be. In years past American commerce has suffered severely from the infliction of high, not to say excessive, charges for check collection upon business men throughout the country. So far has this

type of exaction been carried that it was testified by country banks that in many instances fully one-half of their earnings were due to such charges, and that they could not get along without them. Such exorbitant rates were maintained by agreements among banks and the development of a code of what is called "banking ethics," whereby banks were prevented from cutting the excessive charges had they been so minded.

Much of this evil may be expected now to disappear. The banks will be restricted, when the system is fully in operation, to moderate rates; and thereby a great burden will be lifted from the backs of the commercial community. In the opinion of some, this burden will in part be removed by the process of clearing checks instead of collecting them, which is to be inaugurated under the new system. But whether it does so disappear or not, the merchants of the country will be relieved of the excess charges made by the banks in the way already indicated. In many instances this will save thousands of dollars annually to individual firms.

Effects Economy in Gold

A less direct, although most important, aspect of the new law in its relation to business is seen in the economy of gold that will be effected under it. The original bill provided for maintaining reserves at about their present height, in the belief that ultimately the governing board would let them all down to the level prescribed for country banks. The final act makes a very great reduction in reserve requirements and will release a great volume of money after all new needs for the reserves of the federal reserve banks have been complied with. That this will produce some danger of inflation during the transition period—a danger that will need to be carefully guarded

against by the best sense of the banking community—is evident. After that period has been passed, the reduction in the amount of gold that must be carried constantly in bank vaults will really be far-reaching.

The United States has for many years been obliged by its antiquated banking methods to use much larger gold reserves than any other country in the world in proportion to business done. This was as much a waste as any other unnecessary employment of capital. It meant that the actual cost of operating a bank, which had to be recovered from borrowers in interest charges, was necessarily greater in proportion to the enlarged expense of carrying an unnecessarily high reserve. This cost in turn was heightened in times of panic by the very great expense that had to be incurred for the sake of getting more gold with which to build up the reserves when the latter had been depleted. By lessening this important item of cost in banking and by reducing the exceptional and sporadic elements of cost growing out of panic conditions from time to time, reductions of interest rates will be rendered feasible and will ultimately tranfer their effect to the commercial world.

In this same connection it deserves to be noted that the new system will also render the control of the country's gold supply much easier and simpler. It provides the machinery for dictating, upon occasion, changes in rediscount rates intended to prevent exportation, and other changes intended to aid importation. The mechanism will be automatic and effective and will replace the antiquated, costly, and not very effective methods that have had to be followed in the past. This will directly aid the man engaged in foreign trade and will immensely assist in the management of foreign exchange operations. Exchange will be furnished at much less cost to the com-

munity, and our rates of exchange will be much more closely harmonious with those of the rest of the world.

Aid in Foreign Trade

In times past, there has been constant and well-founded complaint that American business men engaged in foreign trade or operating branches of their houses abroad were obliged to depend upon foreign banks for their accommodation or else finance themselves practically unaided. Where, as in the South American trade, it has been necessary for the American business man to resort to branches of European banks established in the various countries, it has been asserted that such banks, working as they did in close harmony with merchants of their own nationality, were often unfaithful to their American clientele, allowing competitors to know their business operations, and, when disposed to do so, cutting off their credit in favor of such rivals. These charges have had more or less foundation, and it has certainly been true that the banking accommodation of Americans engaged in foreign operations has been poor even at the best.

The new Act provides for meeting these conditions through the extension of the banking system in foreign countries in two ways—it permits member banks to apply for and receive under certain conditions of capitalization, etc., permission to establish branches of their own abroad; and it provides for the establishment abroad of agencies and offices of federal reserve banks.

The powers granted by the Federal Reserve Act with reference to foreign operations of federal reserve banks are very large, and it would appear that the foreign agencies of offices of the reserve banks might engage in practically any class of business they chose (always provided it was of a commercial and short-term character),

dealing with individuals, firms, or corporations, at will. This situation opens up a large possibility in the development of foreign banking upon a scale commensurate with and similar to that which is characteristic of foreign banking institutions.

Up to date absolutely nothing in this direction has been done, for the reason, among others, that financial conditions in European countries are too disturbed to permit of any serious exploitation of the field there with a proper measure of safety. In time, however, the reserve banks will naturally establish offices abroad if only for the purpose of dealing with the question of foreign remittances. When that time comes the question will necessarily be raised whether such offices shall be general offices, acting for the system as a whole, or whether they shall represent federal reserve banks individually. The former alternative is the one which would seem to be indicated by the logic of the case. It may be expected that on some basis of co-operation the federal reserve banks will, therefore, create joint offices particularly in those financial centers where it is desired to operate, and that these joint offices will handle for the several reserve banks such operations as various institutions may see fit to commit to their charge.

Member banks themselves may establish branches abroad and under the supervision of the Reserve Board operate them on very broad and liberal terms of business management. Disturbed foreign conditions and depression of business at home have likewise restricted the growth of such foreign branches of American banks, only a few having thus far been authorized by the Federal Reserve Board. As foreign trade advances, however, it is reasonable to expect that many large American institutions will establish branches in other countries, and

this will not be a movement in competition with the branches of the federal reserve banks. There will naturally be the same distinction between the kind of business done by branches of reserve banks and branches of member banks abroad that there is between the operations of reserve banks and member banks at home. Member banks will engage in many types of operation which are not appropriate for reserve banks, while reserve banks will limit themselves rigidly and closely to short commercial paper and will not be able to engage in financing or in promoting enterprises of any kind.

As the system becomes established abroad it should end the constant complaint about lack of banking accommodations and should place Americans in the foreign trade upon a footing of equality with foreign competitors. It is true that, as has recently been noted, the United States lacks a supply of well-trained bank managers acquainted with foreign practice and ready to expatriate themselves for the time necessary to carry on a branch office elsewhere. Such shortage of trained men will, however, be overcome as soon as opportunity of a real sort is offered, just as the lack of well-prepared consuls has already been overcome in a very large degree since the consular service was placed, at least partially, upon a footing of efficiency, and promotions made in a measure according to merit. It may be confidently expected that American foreign trade will within a short time be afforded all the assistance that it can reasonably call for under the very liberal provisions now made for foreign branch banking.

Relation to Industry

The general management of the new system has wisely been taken, in part, out of the hands of bankers; and has

been placed, in a measure, in those of men representing commerce, industry, and agriculture. This is not because of distrust of bankers or because of a feeling that special discrimination should be shown in favor of given classes in the community. It is due to a feeling, everywhere recognized, that the industrial portion of the community should be given a voice in the management of the commercial credit of the nation, and that banking is, in its highest and best sense, a semi-public function, carried on, not merely as a means of profit, but for the sake of providing for social wants in the creation of credit and the maintenance of redemption. The business man, in the best sense of the word, is expected to take a living and direct part in the work of carrying on the new system, no matter whether he owns stock in any bank or not—and perhaps the more freely if he does not own such stock. He will thus be drafted into service because of the significance of banking to every class and section of the country, and because of the perception that it, like transportation, is no longer to be considered solely a private money-making industry.

To get the full advantage of the system, the business man needs to arouse himself to a new conception of his functions and duties. He needs to bring his methods of borrowing and his view of commercial paper into harmony with European practice, to accustom himself to prompt payment of notes and bills without extended renewals and to the putting of his business upon a short-term cash basis. He needs further to familiarize himself with the idea of banking in the larger sense, and to prepare to share actively in the management of the new reserve banks and their branches, in which important places have been reserved for him.

Unifying the Banking System

An important feature of the Federal Reserve Act is seen in the provision it makes for the unification of the banking system of the United States. The earlier drafts of the Glass bill which afterwards became the Federal Reserve Act, differed in theory as respects this matter, from the final law. The first draft proceeded upon the view that with entrance to the national banking system perfectly free, and with the system entirely under fe eral control, it was desirable to limit membership federal reserve banks to national institutions. Co quently it was provided that only national banks sho be permitted to become members of federal rese banks. This, however, was finally altered so as to ad state banks and trust companies to the new system, w national banks might receive savings deposits and e cise certain trust-company powers.

The theory of the Act as thus altered is plain. It based upon the idea that unification of the whole bank system of the nation was desirable; but such unifica was to be obtained by rendering the functions of natio banks similar in a certain degree to those of state ba and trust companies. Federal reserve banks were, this theory, rendered more than ever necessary, beca the savings bank, real estate, and trust-company visions of the Federal Reserve Act would inevit tend to reduce in some degree the liquid character of the national banks, thus rendering a substitute desirable or necessary, and this substitute would, in the natural course of events, be supplied by the federal reserve system.

Almost immediately after the adoption of the Federal Reserve Act there was a demand from national banks for the establishment of regulations under which they could

gain the advantage of the 5 per cent reserve requirement, and these regulations were speedily issued.

In the same way an urgent demand for the granting of trust-company powers was heard, but the Federal Reserve Board did not deem it wise to take action on this subject for some months after its organization. Later it took the position that all it can grant, under the terms of the law, is power to exercise the trust-company functions when not in contravention of state or local law, and hat the determination of the legality of the functions ust, therefore, be left to the individual banks themlves, in order that they may satisfy their own minds the legality of what they propose to do before proceedg to engage in that class of business, or else take the nsequences in the form of subsequent legal difficulties.

The question of admitting state banks to the federal serve system was, as already indicated, very closely llied to the question of granting the trust-company powrs previously referred to; but the Board did not act upon until June 7, 1915, when it issued a circular permitng state banks to enter the federal reserve system.

The Act provides that every state bank shall comply ith the requirements that are imposed upon national anks with regard to capitalization in relation to populaion, and in regard to the amount of reserves maintained. uch state banks must, however, conduct themselves in a eneral way on the basis of banking management that is laid down for national institutions under the Federal Reserve Act and in the new regulations, although it may be said in passing that there is nothing in either to interfere with the regular banking operations of those banks which are organized under state law, or to prevent them from taking advantage of those broader provisions of legislation which are found on the statute books of some

states. But, in a general way, state banks which enter the federal reserve system must live up to certain requirements as to capital and reserves, and must submit to examination on the same basis as the national members of the system.

It seems to have been supposed by some banks that they must enter the federal reserve system in order to get the benefit of it. That is only partially true. If the federal reserve system attains the objects for which it is intended, it will do so because of the fact that it modifies the whole banking situation. It will provide a market for commercial paper and will tend to bring discount rates to a degree of uniformity that has never before been possible. When the conditions are such throughout the country that commercial paper of known value can be marketed, and when, through the development of the principle of combined reserves, panic dangers are largely eliminated, every institution, whether a member of the reserve system or not, will get the benefit of the improved situation. Of course, this result cannot be reached unless a sufficient number of commercial banks are joined together in the system. Enough are already members practically to insure this state of things, but the assurance will become more and more distinct as more and more of the commercial banks join.

Should they all enter, the system will gain no additional strength by the incorporation of members whose business is of a primarily investment character, even though they technically comply with the reserve requirements. Neither will the institutions themselves profit particularly by such membership. They will get the advantages of the system in any case by being enabled to borrow under more favorable conditions from the member banks which have rendered their own assets more

liquid through their own membership in the system, and have thereby enabled themselves readily and regularly to afford such aid as may be asked for by their banking customers.

TEST QUESTIONS

1. What is the nature of the federal reserve banks?
2. Explain their regional character.
3. Compare the regional banks with the central banks of European countries.
4. What is the nature and function of branch banks under the federal reserve system?
5. Explain "Heretofore American banking has been too largely an agency in the service of speculation."
6. How does the new act remedy these conditions?
7. Explain the new act as an aid to business. Show by various practical applications.
8. How does the federal reserve system reduce collection charges?
9. How does the new system effect economy in gold?
10. Explain the advantages which the system offers in foreign trade.
11. On what conditions may state banks become member banks of the federal reserve system?
12. Is such a move desirable from the standpoint of the financial strength of this country? Of the state banks themselves? Why?

CHAPTER XX

BANKING IN THE UNITED STATES AND ABROAD

The banking experience of the United States has been developed along lines entirely different from those followed by European systems although, as has been seen, the United States embarked on its first banking experiment by chartering the First Bank of the United States on a basis substantially similar to that upon which the great banks of foreign countries were founded. The systems of the several states, which superseded the First Bank of the United States, then continued contemporaneously with the Second Bank, and at last culminated in the national banking system. These systems were local products, the outgrowth of special conditions in this country, and were not closely modeled after any foreign banking systems. Only such features were adopted as seemed to be well adapted to our needs. The effort to improve the note-issue features of the national banking system, particularly, has given rise to long-continued inquiries into foreign banking and to the offering of various plans considered well adapted to produce in the United States the beneficial results that have been obtained under somewhat different conditions elsewhere.

Much can be learned from the study of foreign banks, but it is well to bear in mind that these banks are organized in countries with a different type of government and with business methods that are on the whole decidedly unlike our own. A banking system must not be

considered as a thing apart but looked at in the light of actual experience and as an element in the commercial structure to which it belongs.

Since the beginning of the European war the financial and banking systems of all the principal countries have been undergoing a period of stress and trial, which has resulted in many modifications of practice. No one can yet tell what will be the conditions under which the European banking institutions will emerge from the war or what modifications in their methods will be necessitated either temporarily or permanently as the result of war needs and conditions. That there will be such modifications no one can question. In the meantime the experience of the various countries in financing their needs and in adjusting the banking machinery so as to harmonize with new requirements is proving one of the most interesting chapters of financial history of recent years. War necessities have made foreign governments reticent about making known the detailed facts as to some of the principal financial questions and conditions now prevailing, so that only a general analysis and discussion can be devoted to them. In brief form, however, it will be endeavored to indicate the main elements in what has been done.

The Bank of England

Among foreign banks, that which conspicuously interests American students is the Bank of England, and the system of banking that has been built up around it. Chartered in 1694, the Bank of England in its life of more than two hundred years has gradually become the basis of government finance and the mainstay of private financial business operations in Great Britain. From time to time modifications have been introduced by law into the char-

ter or regulations by which the institution is controlled, but today it rests primarily upon the Bank Act of 1844.

The Bank of England is essentially a great government institution owned by private individuals which controls and supplies the note circulation and which is practically divided into two departments, one called the Issue Department, the other the Banking Department, whose functions are sufficiently indicated in a general way by their names. The issue department under the Act of 1844 was authorized to issue notes only upon government securities or coin or bullion to an equal amount held as a backing. It was provided that the amount of notes issued on securities should not exceed £14,000,000 (about $70,000,000) while, above this, additional issues were to rest on coin or bullion. However, the other banks of issue which then existed in England were to lose their power of issue in the event that they should cease at any time to continue their notes outstanding. Under such circumstances, the Bank of England was to be allowed to increase its issue based on government bonds to the extent of two-thirds of the country bank circulation retired. In that way, about $20,000,000 has been added to the bond-secured circulation, which is now in the neighborhood of $90,000,000,[1] the total notes in circulation being about $150,000,000. The Issue Department exchanges notes for coin and coin for notes, and if the Banking Department wants notes it gets them from the Issue Department, just as any one would, by depositing coin or bullion there.

In the event of a panic or crisis, resulting in an excess in hoarding of coin and currency and the consequent demand for more circulation, the government has some-

[1] The figures given in various places in this chapter represent conditions as they existed before the war brought about an abnormal situation.

times "suspended the Bank Act"—an operation which was tantamount to permitting the bank to issue its notes without coin, bullion, or government securities behind them, simply on the strength of the commercial paper it might have in its portfolio. This expedient is analogous to that of clearing-house certificates adopted on various occasions by American banks as we have already seen.

The Banking Department does a "straight" banking business upon ordinary short-time paper. Its operations have tended to assume the character of rediscounts, to a considerable extent, and the bank is now practically the banker's bank of the country.

Although in close relation with the government, it is a private institution. It receives public deposits and furnishes a great deal of fiscal service, but theoretically it has the same relation to the government as it does to individuals and corporations. It is controlled by 24 directors and a governor and deputy governor serving for one year.

Owing to the practice of other banks in depositing their reserve with the Bank of England, the bank is practically in control of the gold supply of the country and feels it to be a fundamental duty to adopt such measures as will prevent gold from leaving the country to any undue extent. This it does by raising the rate of discount on occasion, the effect being that a drain of specie can be checked and thereby the coin of the country prevented from going elsewhere, pending a readjustment of business relations which will determine the exact distribution of coin and bullion to which the various countries are entitled. The discount rate varies considerably from time to time, the average running from 3 per cent to 5 per cent and occasionally reaching 7 per cent or higher. These higher rates are usually applied against the out-

side public rather than against the bankers who deal with the institution.

English Joint-Stock Banks

Around the Bank of England have grown up many strong joint-stock banks which stand in somewhat the same relation to it as do the national banks of the United States to the Federal reserve banks of their districts, save that of course the latter relation is far less close. These banks do business chiefly without much use of note currency other than that furnished by the Bank of England, extending their accommodations in the form of deposit credits against which checks are drawn. As already seen, the note currency includes no element of elasticity and the expansion and contraction of credit takes the form entirely of additions to or subtractions from the deposit account. Taking the banks of England as a whole, their deposits, current accounts, and notes outstanding are in ordinary times £800,000,000, their capital being £68,000,000 and their cash, either on hand or available on short notice, £225,000,000.

There has been in recent years a strong tendency to consolidate these banks and concentrate their operations through the establishment of branch banks. Owing to the practice of depositing with the Bank of England, these joint-stock banks are thus dependent upon it for their solvency and look to it to protect the reserve of the country through its changes in the discount rate. The joint-stock banks are able to do a good deal of business that could not be handled by the Bank of England, while at the same time supplying classes of credit that are needed by the community. The process of rediscounting at the bank, the proceeds being carried to the credit of the various banks, is especially active in times of anxiety

when the whole country is looking to the maintenance of the Bank of England reserve. At such times bankers having accounts do not hasten to draw out gold and currency as do those in the United States, but instead keep the cash in this central reserve, relying upon the government to permit the bank to increase its issue of bank notes in case of extremity.

Scotch Banking System

Well worthy of notice in contrast with the Bank of England is the Scotch banking system, which includes a considerable number of institutions operating independently and with relatively small capitals. Their characteristic feature has been found in the elasticity and safety of the bank notes they have issued, and in the power exhibited of drawing out the savings of the community and making them active. At the opening of the European war eight strong banks had outstanding a total average circulation of about £7,200,000 or about $36,000,000, against which is held something under £6,000,000 or about $30,000,000 in specie. This amount of specie, however, constitutes the total reserve of the banks and is their reliance not only for the redemption of note-liabilities but for meeting the deposit liabilities as well.

The English Bank Act of 1844, which was extended to Scotland in 1845, permitted the banks already existing in Scotland to keep outstanding an authorized circulation equal to the average during the year ending May 1, 1845, and above that to issue as many notes based on coin as were desired. The authorized circulation of the Scotch banks is now £2,676,350, so that the actual circulation is well within the limit set by the combination of gold and silver holdings and authorized limit of uncovered circulation. Whereas the Bank of England notes are not less

than £5 (or about $25) in denomination, the great bulk of the Scotch circulation is under £5. The Scotch banks have consistently endeavored to extend credit to men possessing small capitals, or perhaps having little more than an assured business opportunity, the notes being freely issued as a distinct loan of credit, rather than as a kind of currency. By using the note issue freely, the banks have been enabled to pay substantial interest upon deposits and thereby have induced the growth of saving. By paying interest on deposits, they stimulate the return of the notes to the banks as a foundation of savings accounts, and thus the activity of redemption is advanced.

In a number of ways, the Scotch banks have been more serviceable and more inclined to eliminate the unnecessary formalities of banking than have the English contemporary institutions, and their service to the community has been correspondingly greater. Particular advantage has been derived by the country from the free issue of notes subject to immediate redemption but without the requirement of special security behind them.

The situation of the Bank of England at the opening of the European war in August, 1914, was about normal, there being not only no weakness apparent but all English financial institutions being in an unusually satisfactory condition. At the outset of the war it was of course desired to go on paying cash for all banking obligations just as had been customary in the past. Panic and uncertainty, however, were so serious that practically the first thing that happened after the outbreak of the war was the establishment of what was called a "moratorium," that is to say, an arrangement under which it was legally enacted that creditors could not for a certain specified time claim payment of what was due to them. This would not have been necessary had the banks been willing to

call loans, insist upon payment, and compel their debtors to liquidate. This policy, however, would have merely passed on the demand to other debtors, and a general condition of bankruptcy would have ensued. There was some withdrawal of cash from the Bank of England at the opening of the war, and in consequence rates were raised by the bank from 4 per cent to 10 per cent with the idea of preventing the creation of further obligations. This measure had little effect notwithstanding that the bank, so long as the run was made, met practically all demands upon it. The stock exchange was promptly closed in order to prevent a downward rush of prices, due to the effort of holders to sell out and realize in order to avoid loss or get means to pay creditors.

In view of the draft on the banks after the closing of the stock exchange and other dangerous symptoms, the Bank Act, which forbids the issue of bank notes except under specified conditions as already described above, was suspended on August 6 and government notes were issued for the purpose of meeting obligations, these notes being convertible into gold on demand. At the same time, the British holders of claims on foreign countries insisted upon being paid, while there was a general interruption to international trade due to uncertainty of travel on the Atlantic.

The moratorium lasted until November 4, and the stock exchange reopened not very long thereafter. Meantime Great Britain had succeeded in obtaining a very large amount of gold from foreign countries. The draft, however, upon British resources, due to the necessity of paying for an excess of imports, subjected Great Britain, as the principal banking center of Europe, to danger and led to the loan of $500,000,000 which was negotiated in the United States in the autumn of 1915. This loan had been

preceded by the development of adverse exchange, which was due to the fact that imports into Great Britain were so heavily in excess of exports. Exports from the United States were so heavily in excess of imports as to create a situation in which American goods had to be paid for in credit or else gold had to be shipped. Great Britain, however, like other countries, was unwilling to pay more gold than was absolutely necessary.

Summing up, the main effect of the war, save for the moratorium and its attendant incidents, has been the creation of government currency and the development of an unfavorable foreign exchange situation, which must be met by prompt means of payment of foreign obligations.

Bank of France

A system widely different from that of England, although with points of similarity, is seen in France. There the Bank of France, organized in 1803, performs the same fiscal functions as does the Bank of England, and controls the specie reserve of the country just as does the Bank of England. It, however, issues notes without being required to hold government securities behind them and without being subject to detailed dictation as to the amount of its reserve. The Bank of France is owned independently of the government, but is closely supervised by it. Its capital amounts to only 182,500,000 francs, entirely in private hands, but the government is allowed to appoint the governor and two deputy governors and, at the will of the minister of finance, to remove them from office if circumstances seem to require. Public moneys are received on deposit and various fiscal services are performed, while the bank has some impor-

tant functions in connection with the issue of government securities and the payment of installments of interest.

An analysis of the accounts of the Bank of France shows a different state of affairs from that which is exhibited by the accounts of the Bank of England. Out of liabilities of about 6,000,000,000 francs on a date prior to the war, nearly 5,000,000,000 were notes outstanding, while coin and bullion on hand aggregated upward of 3,700,000,000 francs. The commercial paper held at that time was only about 1,300,000,000 francs and deposit accounts of private individuals amounted to less than 500,000,000 francs.

These accounts point to two important facts in connection with the service performed by the Bank of France. Its function, like that of the Bank of England, is very largely that of discount, and its operations of this kind extend even to very small transactions. Commercial paper of less than 100 francs—about $20—is discounted in great quantities by the bank, and there have been years when the average value of the paper discounted was not much more than 700 francs—about $140. On the other hand, the immense volume of the notes outstanding shows that the institution makes its loans by the issue of notes rather than by the creation of deposit credits. Practice in France differs in this regard very radically from that of England, the population being far less accustomed to the use of checks and far more favorable to circulating notes or gold.

Like the Bank of England, the Bank of France has assumed the duty of controlling the gold supply of the country by varying its rate of discount, raising it when there seems danger of an undue loss and lowering it at other periods. This has been a somewhat easier task in France than in England because of the smaller impor-

tance of Paris as a strictly financial and investment center, as compared with London. The Bank of France has also resorted to the plan of buying gold at some expense, instead of increasing its discount rate at times when it did not feel that an advance in the rate, entailing as this must considerable suffering upon commerce and industry, would be wise. As in England, so in France, a structure of independent banking has been built up around the Bank of France, that institution serving as a banker's bank, just as does the Bank of England.

France, like England, is, as a rule, a creditor country, receiving ordinarily more from foreign countries than she has to pay. At the opening of the war it is estimated that there was probably seven billions of francs in gold in the country, four billions being in the Bank of France, and three billions in the hands of individuals. At the outbreak of the war gold practically disappeared, its place being taken by paper, silver coin, and subsidiary money. In France, as in Germany, private individuals have been encouraged to bring hoarded gold and to turn it into the reserves of the Bank of France. The Bank of France is not, technically speaking, a government bank, but has always been closely controlled by the government. Steady increase has been made in the amount of its notes since the beginning of the war, and the increase in note issues enables the bank to make large direct loans to the government at the same time that it continues to discount freely for other banks and for individuals. Due to the patriotic depositing of gold by French citizens, the stock of gold in the Bank of France has increased about half a billion francs since the beginning of the war, notwithstanding that approximately an equal amount has been paid to the Bank of England. In France, as elsewhere, foreign exchange has been badly disorganized, owing to

the heavy excess of imports over exports; and this will continue to be a more or less marked condition until a normal balance of trade has been established, as it may be expected to be when the war is over, and business stability has been reintroduced.

The Reichsbank

The German Empire has developed a system of banking analogous to that of England and France, though dating only from the period of the formation of the German Empire. At that time the Bank of Prussia, which had been chartered in 1765, was developed into the so-called Reichsbank or Bank of the Empire. By legislation of 1875, modeled in a measure after the English Bank Act of 1844, an effort was made to put the Bank of Prussia into somewhat the same position as the Bank of England. A law passed in 1873 had already provided that bank notes should be retired from circulation before the opening of 1876 unless their denomination was expressed in marks, while the smallest notes to be issued were to be for 100 marks or about $23.75.

The Act of 1875 substituted the Reichsbank for the Bank of Prussia and made its capital 120,000,000 marks, divided into 40,000 shares, while it was directed that the note circulation should not exceed 250,000,000 marks ($60,000,000) except under specified conditions presently to be noted. This was increased by successive steps to 472,829,000 marks. As in England it was further provided that existing banks might retain their circulation rights, but in the event that they abandoned them they were to pass to the Reichsbank, increasing its authorized issue to a corresponding extent. It was directed that behind this authorized circulation at least one-third in funds must be held, such funds being money or govern-

ment bonds, gold bullion, or foreign gold coin. Above the authorized limit, all issues of notes were to be backed value for value by protection of the same description, except under the conditions presently to be noted.

As in the case of the banks of England and France, the ownership of the institution was left in private hands, but it was subjected to direct public oversight and control of a positive character. The chancellor of the Empire is president of the bank, while four other members of a supreme council are government nominees, one of whom is named directly by the emperor. A board of directors controls the business operations, and in this board membership is attained by government nomination. Another board of commissioners elected by the body of stockholders represents the private owners and takes charge of the routine business. Like the Banks of France and England, the Bank of Germany manages public financial operations, receives deposits of public moneys, etc.

The distinguishing feature of this bank, to which reference has already been made, is seen in the special provision for the issue of bank notes over and above the authorized issue under certain specified conditions. In order to meet the contingencies when there is a specially heavy demand for currency, it is provided that notes may be put out by the bank over and above the authorized limit, on condition that the bank shall pay a tax of five forty-eighths of one per cent per week or about 5 per cent per annum upon all such excess circulation. The excess circulation, moreover, has to be based upon bills of exchange running not over three months and secured by two signatures. Subject to these conditions, the Reichsbank has sometimes issued as much as 625,000,000 marks

over and above the authorized issue. In 1907, the tax thereby necessitated was more than 5,600,000 marks.

Measures similar to those employed in France and England for the control of the gold reserve are pursued by the Bank of Germany, which has come to assume very much the same position toward the other German banks that is occupied by the Banks of France and England toward the banking systems of those countries. It rediscounts the paper presented to it by the other banks, and most of the paper it accepts is on extremely short time. The notes issued are large in volume because in Germany, just as in France, the habits of the community call for a large volume of actual circulating currency, while the use of checks, although growing, has not attained the same high degree of development as in England or in the United States.

At the opening of the war monetary and banking conditions in Germany were very favorable. Every effort had been made since 1908 to enable the Reichsbank to strengthen itself and to require the various subsidiary banks to increase their deposits with the Reichsbank and to curtail unreasonably large lines of credit. Thus at the beginning of August, 1914, Germany was in a favorable situation. The government had, however, prepared a number of bills for enactment in the event of war and these were passed by the Reichstag almost at the outset. Of the four principal measures thus adopted the first made the notes of the Reichsbank lawful money, while the government treasury notes were also made lawful money and their issue authorized. The treasury was relieved of the necessity of redeeming these treasury notes, while the various banks of the country were permitted to redeem their own notes with the notes of the Reichsbank.

A second measure was adopted in the repeal of the

German Currency Act of 1873, which provided that subsidiary and minor coins should be exchanged for gold upon demand. They were now to be redeemed either in treasury notes or in notes of the Reichsbank.

A third measure permitted the Reichsbank to be relieved of the requirement that it must always hold two-thirds of the amount of its circulating notes in the form of double-name paper, it being permitted to discount obligations of the government running three months and to hold such obligations instead of commercial paper beyond its outstanding circulation. Further, the tax upon circulating notes was also repealed.

A fourth law provided for the establishment of special "loan banks," which were intended to extend credit against collateral securities. They had no capital but were authorized to issue "loan bank notes," and these could be held by the Reichsbank as a part of its legal cash reserve.

Summing up, it will be seen that the whole effort of the German government was to place the country upon a paper basis, to prevent gold from being paid out or leaving the country, and to abandon the idea of specie payment. The result of these measures has been to prevent gold from leaving Germany, but inasmuch as Germany has been largely isolated from the rest of the world in regard to trade, it is not possible to say how these measures would have affected foreign exchange—the true test of the effect of any financial measure bearing upon the currency or the status of banking institutions. There was a sharp rise of exchange on Berlin in practically all markets even at the very outset of the war, and since then the depreciation of German bonds and obligations in foreign markets has shown that Germany is merely passing through the same experience as did the United States

during the Civil War, when the country was placed upon a footing of irredeemable paper, this paper promptly depreciating and requiring a long period to re-establish specie payments. Germany, in other words, will carry a large part of her war obligations in the form of paper currency and this, in spite of the drastic measures to prevent the increase of prices, has greatly depreciated, while the banks (although not losing their gold) have suffered in other ways through the tremendous accumulation of irredeemable paper and the enormous amount of their loans to the government, either direct or indirect.

Canadian Banking System

A strikingly different system as compared with those already studied is seen in Canada where, instead of a single central institution surrounded by a group of smaller institutions leaving their reserve with it and relying upon the central bank for rediscounts and for a supply of notes, there has grown up a system of tolerably strong chartered banks, resting upon substantially the same foundation and fairly comparable with one another. In 1908, there were 30 banks with a total capital of some $96,000,000, the notes outstanding amounting to about $67,000,000 and discounts to about $549,000,000. The essential feature of the Canadian system is seen in the perfect freedom of issue, subject only to general restrictions, which is accorded to the banks and the special system of securing the notes by means of a joint guarantee, or safety, fund.

Under the Canadian law, shareholders, like those of the national banks of the United States, are liable to an amount equal to the par value of the stock they hold, while note holders are given a first lien upon the assets of the bank in the event of failure. Every bank is com-

pelled to contribute to the bank circulation redemption fund, which is maintained at a sum equal to 5 per cent of the average circulation of each bank contributing thereto. This fund is kept in the hands of the minister of finance, and in the event of a bank failure, the notes of such bank begin to bear interest at 6 per cent per annum from the time of suspension to the date set for payment. In case the redemption fund is inadequate to pay the notes, the fund is drawn upon irrespective of the amount that the given bank has put in. In this way, a strong system for the redemption and securing of the notes has been established, while the comparatively small number of banks makes it possible to follow with considerable care and accuracy the condition of each of the institutions. Occasionally, there has been a bank failure in Canada, but in every case the protection has been entirely adequate, the notes remaining at par and being easily disposed of for investment purposes, owing to their bearing interest at 6 per cent. Although it has sometimes been proposed that the banks be required to maintain a fixed minimum percentage of reserve, this idea has never been put into effect, but the banks have been left free to manage their note issues and their cash reserves as they see fit. Their success in meeting the needs of the community has been unusually great.

The Canadian government, like most other nations involved in or affected by the war, was obliged to resort to special measures of protection. Mr. Fred W. Field has sketched the policy of Canada as follows:

(1) The Dominion government stood ready to issue Dominion notes to such an amount as was necessary against securities deposited by the banks and approved by the minister of finance.

(2) The government authorized the chartered banks

of Canada to make payments in bank notes instead of in gold or Dominion notes until further official announcement.

(3) The redemption in gold of Dominion notes was suspended.

(4) The power of issue of Dominion notes was increased by providing that the finance minister should hold gold to the amount of 25 per cent of the Dominion notes issued up to a total issue of $50,000,000; and in regard to Dominion notes issued in excess of that amount, gold to be held equal to such excess.

Comparatively little use has been made of the authority permitting the issue of Dominion notes by the government against approved securities. Less than $500,000 of such advances were outstanding at a recent date.

The legislation in regard to Dominion notes and gold was framed so that the Canadian supply of gold could be held against foreign demands. This followed the policy of British banks and those of other countries. It was specified, however, that the total amount of the notes of any bank's circulation was not to exceed at any time the amount of its notes issuable under the provisions of the Canadian Bank Act.

It is under the fourth heading that matters of chief interest have happened in regard to Dominion notes. By the special legislation there was an integral change made in the Dominion Notes Act whereby a margin of 25 per cent in gold might be held in respect of an issue of $50,000,000 instead of $30,000,000 as under the previous legislation. As regards denomination, notes of any denomination might be issued to make up this amount. It may be wholly in one's, two's, or five's or large legals, but it will be a combination of all.

Branch Banking

Associated with the special features of the note-issue system of Canada is that of branch banking, to which an exceptional development has there been given. Each of the Canadian banks is authorized to establish branches where conditions seem to demand it, and the result has been the creation of more than five hundred branches scattered throughout the country. These branches loan the notes issued by the parent institutions to agriculturists and others who prefer their credit in this form rather than in that of deposit accounts. The great number of the branches makes it possible to distribute the notes widely, and also to arrange for their prompt retirement, while the relation of the branches to the parent institutions has the effect of distributing the capital of the country in a way that makes it possible to adjust the rate of discount by a comparison of the total banking capital with the total demand for bank accommodation.

The effect of this general distribution of capital and accommodation has been to make the rate of discount very much more even than it has been heretofore in the United States. Thus, in the remote parts of Western Canada, the rate of discount is seldom more than 1 or 2 per cent higher than in the cities of the east (supposing equally good security to be offered as a basis for the loan), while in the United States on first-class security the rate of interest may have been 12 to 15 per cent in Texas as against 4 in New York. Such ability to get accommodation when entitled to it is highly important in the development of the newer portions of the country. Canada's banking system has been an important factor in the cheap and rapid moving of the crops and in the upbuilding of the manufacturing business of the country.

Branch banking systems are found in practically all countries at the present time. The possible development of such a system in the United States will be watched with great interest. In England, France, Germany and elsewhere, branch banking has attained a large development, but it is in Canada that the most valuable light is thrown by the branch system upon the question what might be expected from branch banking if it is to be effectually introduced in our own country, and this is the reason for regarding the branch system, from our standpoint, as a specially Canadian development.

Other Banks

Reverting for a moment to European conditions, numerous strong central institutions well worthy of study may be observed. Among these may be mentioned the Austro-Hungarian Bank, the Bank of Russia, the National Bank of Belgium, the Bank of the Netherlands, and various others. In America, the banks of Mexico, among them the Central Bank of Mexico, afford some interesting lessons. In South America more or less success has been had in the several Latin Republics in organizing systems of their own, in some of which a Central National Bank plays a part similar to that of the chartered banks of Europe, while others are organized on a plan distantly resembling the national banking system of the United States. Thus far there are comparatively few lessons to be drawn for our own use from the South American banks.

Principal Types of Banks

Reviewing the experience of modern countries with banking, we may fairly say that three great types of banking systems are now conspicuously before the world.

One of these is the system best typified by the national banking system of the United States, that of independent banks varying in size, issuing notes either with or without special security behind them, organized under uniform conditions at the will of the individuals who desire to engage in the business, and controlled more or less rigidly through a system of government inspection and oversight.

A second system is best exemplified in Canada where, as already seen, the banks are chartered, are comparatively few in number, but are kept in competition with one another by a power to organize branches freely while bound to one another in respect to note issues through a joint obligation to maintain the soundness of the note currency by a safety, or guaranty, fund.

A third system is that exemplified by the Bank of England, where one conspicuously strong institution stands in close relations to the government Treasury, acts as fiscal agent, issues notes under specified conditions, protects the reserve of the country, holds the funds of other banks, rediscounts for those other banks, and generally exercises a controlling and modifying influence besides carrying on the international financial affairs of the country. As we have seen, banks of this latter type may be required to protect their notes by a special class of security as in the case of England, and in a lesser degree in Germany, or may be left to manage their note issue as they see fit, as in the case of the Bank of France.

Along these three lines, the banking systems of the world are developing, but they are not developing at the same rate of speed or even parallel with one another. On the contrary, there are some features in modern banking that may be regarded as the distinct outgrowth of past experience and as having proved their worth. These ele-

ments will undoubtedly be recognized and adopted in the banking systems of the future, and they will necessarily be adopted by those nations which seek to put their banking systems upon a foundation that will be of greater service to their citizens. Without attempting to speak too positively on this head, we may safely indicate a few such features as those that will be of growing importance henceforth.

Characteristics of Modern Banking Systems

The idea of combination of bank reserves has undoubtedly won its way to the front and will be more and more accepted as time goes on. Such combination of reserves does not call necessarily for the creation of a central bank. It means simply the joint exercise of oversight and control of ultimate reserves, whether this is obtained through the mutual check exerted by groups of banks upon one another or by the spontaneous recognition of some one bank of conspicuous strength as the leader and reserve holder of the system.

Another feature that has found positive acceptance is that of free, elastic note issue, the protection of the notes being left in the hands of the bank or banks by which they are issued.

A third feature of the successful banking system is seen in the establishment of branches under conditions that will sufficiently protect honestly competing banks, but will at the same time render it possible for banks to supply the needs of the community to the fullest extent.

Finally, may be mentioned as an unquestionable necessity in the suitable rounding out of a banking system, the establishment of proper relationships between the government treasury and the system in such a way as fully to safeguard the community against excessive withdraw-

als of coin or currency into the government vaults and in such a way as to relieve the government from the necessity of helping individual banks from time to time when they have run into difficulty as a result of careless or too extensive operations.

In testing any banking system, it is therefore necessary to inquire how far it conforms to these general ideas and how far, if it does not conform to them, it is capable of being remodeled in a way that will bring it into more or less harmony with them. It should be repeated that the application of these ideas is not the same in every country. Differences in the development and upbuilding of their business systems call for different methods of applying similar principles.

TEST QUESTIONS

1. What are the essential characteristics of the Bank of England?

2. Explain the process by means of which the Bank of England controls the gold supply of the nation.

3. What is the nature and organization of the English joint-stock banks?

4. What are the distinguishing characteristics of the Scotch banking system?

5. Explain the organization of the Bank of France and show its relation to the government.

6. Explain the organization of the Reichsbank. What special powers are given to the Reichsbank over the issue of notes?

7. What are the essential features of the Canadian banking system?

8. What are the three chief types of modern bank systems? Give examples of each.

CHAPTER XXI

PROBLEMS OF AMERICAN BANKING

It may be expected that during the next few years the development of banking in the United States will center very largely around the application of the Federal Reserve Act, its modifications, where such modifications prove to be necessary, its adaptation to conditions, and the adjustment of the national banking laws to it. It is, therefore, worth while to review in brief outline some of the main and essential features which will call for attention in these connections.

Question of Crises and Panics

As has been seen at an earlier point in this discussion, one of the conditions which most directly gave rise to the federal reserve system was the fact of recurring crises and panics, which threw the business world into confusion and entailed disaster upon the community. It was undoubtedly a prime object, if not the primary object, of all measures of banking reform, to terminate the dangers involved in such conditions and to provide a means of safeguarding the national business interests against such occurrences.

The Federal Reserve Act, like other proposed measures of banking reform, has this problem fully in view. It, however, deals with the question in a way that differs from many of the bills which have preceded it. The central thought of the Federal Reserve Act is that of

strengthening the banking system of the United States in such a way as to forestall crises and panics by correcting the conditions which lead to the development of such dangers. To this end, the act provided for open-market operations, which were intended to give to the banks the power to go into the market, and by buying paper or selling what they already held, as the case might be, to exercise a regular and powerful control over rates of discount by applying a check to undue tendencies to an increase, and, at the same time, by affording a stimulus when the opposite situation rendered action necessary.

This, it will be seen, is a radically different idea from that which led to the selection of an emergency or panic relief measure, which furnished a means simply of helping hard-pressed banks when dangerous conditions had already made themselves manifest. To apply the Federal Reserve Act in this aspect it will be necessary to develop American banking along the lines marked out by European experience and to educate the banking community to the view that federal reserve banks may be expected to compete with them freely whenever such action is for the best interests of the community.

This thought is worthy of considerably greater elaboration. Many persons have held from the beginning that it was not desirable to attempt to establish anything more than provision for exceptional and unusual conditions in the United States and that, therefore, we could safely content ourselves with legislation providing for emergency currency or emergency treatment of banking needs. This was the underlying idea of the Aldrich-Vreeland Law, a law which, after lying dormant for some years and being amended, served a valuable purpose during the stringency of 1914. It was supposed by many persons when the Federal Reserve Act was passed that the

federal reserve banks had been recognized, not as emergency banks, but as permanent aids to sound finance in the United States, the co-operative expression of the best sense of the banking community upon general conditions affecting all bankers in greater or less degree, and, as such, acceptable to all. Now that there has been some experience in the operation of the federal reserve banks, the older question is reappearing in a new form.

How Reserve Banks Meet the Situation

The question is directly raised whether federal reserve banks should be active institutions, playing a direct part in the financial life of the community, or whether they should be sporadic and occasional in operation, called into play only when necessity requires. This question may be discussed from two standpoints. We may consider what the act itself has provided, and what effect it is wise and desirable, from the standpoint of banking theory, that it should have upon others than those who are charged with its administration.

The Federal Reserve Act is clear and unmistakable on the first point. It provides for rediscounts to member banks as the first and primary function of the federal reserve institutions. But it also provides for what are called "open-market operations," the latter to be engaged in at the will of a reserve institution and as conditions seem to dictate. What was the object of the framers of the act in making this provision? There can be no doubt as to their essential purpose. They recognized that there would probably be times when, through lack of rediscount offerings, the banks would be unable to exert that direct effect upon the market which would be necessary if they were to perform their full function as holders of the ultimate reserves of the country. It

was the intention of the Federal Reserve Act to provide a means whereby the banks could make their rates of discount effective in the same sense in which that operation is performed by foreign banking institutions, such as the Banks of England and France. It was intended to vest them with the authority both to buy and sell from persons, firms, corporations, and banks, other than their own stockholders, in order that at times they might extend the benefits of their discounting power to non-members or in order that they might make provision against contingencies of the future, which member banks, although perfectly aware of, were prevented from providing for by the exigencies of competition. It was intended that they should compete with member banks or with members of other federal reserve banks, if occasion demanded it, for the obvious reason that only by so doing could they in the highest degree serve both the interests of the public and that of the banking community as a whole, which, in the best sense, is synonymous with that of the public.

And in this view of the functions of the federal reserve banks, the Federal Reserve Act based itself firmly upon experience. There are no banking institutions in foreign countries which deal only with banks and are cut off from any communication with others. Either by direct dealing with the public at large and the continuous discounting of paper irrespective of its amount, provided it conforms to certain other requirements, or by direct dealing with specific classes of makers or owners of commercial paper, these banks exert the weight of their influence in the market, and do what they can to stabilize gold movements, render rates of discount uniform and fair to all, and at the same time, make provision against

future market developments that might otherwise be left to work themselves out according to circumstances.

When the Federal Reserve Act was first taken under consideration, it was suggested in influential quarters that the banks be given power to receive deposits from, and deal directly with, individuals. The matter was carefully considered, and, for a variety of reasons, it was not deemed wise to take this step. Later it was suggested that the government should practically supply the basic funds and operate the proposed new banks in order that it might fully and entirely control their dealings and their effect upon the market. This, also, after being considered, was laid aside, and in its place there has been substituted a system of co-operation between the government and the banks in which the latter have control of their own funds and can do with them as they please, notwithstanding that they are recognized as being vested with a public interest. Will they recognize that these funds are to be used like the reserve funds of foreign countries for the purpose of bringing about a condition of stability and balance in the money market, or will they persevere rather in the view that emergencies are to be allowed to create themselves and that on such occasions, and then only, the combined power of the reserves of the country is to be brought into play? The question is one that must be definitely disposed of.

Comparisons of Reserve Banks

Some are fond of drawing analogies between federal reserve banks and reservoirs of water, while others compare them with a set of fire engines, and still others choose to draw an analogy between a reserve bank and an extra dynamo in a power house. The most correct comparison is that which regards them as being similar

to what we know as a bank—the reserve bank is neither a reservoir, a fire engine, nor a power house, but it is a bank; and in order to do its work with success and to give the banking results which experience has indicated as necessary, the reserve bank must work on banking lines and guide itself by banking principles in the conduct of its operations. It, in fact, differs in no essential respect from the best type of bank as we know it today, save that it lays special stress upon maintaining the liquidity of its assets. In this connection the Federal Reserve Board, in its first annual report, made the following statement:

It should not, however, be assumed that because a bank is a reserve bank its resources should be kept idle for use only in times of difficulty, or, if used at all in ordinary times, used reluctantly and sparingly. Neither should it be assumed that because a reserve bank is a large and powerful bank *all* its resources should be in use all the time or that it should enter into keen competition with member banks, distributing accommodation with a free and lavish hand in undertaking to quicken unwisely the pace of industry. Such a policy would be sure, sooner or later, to invite disaster. Time and experience will show what the seasonal variations in the credit demands, and what facilities in each of the reserve banks of the several districts will be, and when and to what extent a reserve bank may, without violating its special function as a guardian of banking reserves, engage in banking and credit operations. The reserve banks have expenses to meet, and while it would be a mistake to regard them merely as profit-making concerns and to apply to them the ordinary test of business success, there is no reason why they should not earn their expenses, and a fair profit besides, without failing to exercise their power functions and exceeding the bounds of prudence in their management. Moreover, the reserve banks can never become the leading and important factor in the money market which they were designed to

be unless a considerable portion of their resources is regularly and constantly employed.

This statement covers the ground and clearly sets forth the purposes of the Reserve Act. The functions of the reserve banks may be summed up in Biblical language by suggesting that, while the bank must be in the world, it does not need to be of the world; that is to say, if it is to be of service, it cannot withdraw itself like a financial hermit from the ordinary run of transactions. Neither can it be guided by the profit-making spirit and subordinate every other policy to that of the making of dividends. It is the wise and safe middle course that the reserve bank must follow and through which it will attain its highest usefulness.

Relations to State Banks

The question how successful the federal reserve system will ultimately be will depend in some measure upon the degree in which it is able to enlist the co-operation and active support of state banks. At the present time thirty such institutions are members of the federal reserve system, and the movement of state banks into the system is slow, although there has been a rapid enlargement of the number of national banks partly through the conversion of state banks into national institutions since the system was first established.

Admittance of State Banks

The Federal Reserve Board has adopted liberal regulations under which state banks may become members of the system and may withdraw practically at pleasure, subject to very reasonable limitations and restrictions. Under this regulation the principal elements requiring

notice in connection with the membership of state banks are here summarized:

Any eligible state bank or trust company may make application to the federal reserve agent of its district for an amount of capital stock in the federal reserve bank of such district equal to 6 per cent of the paid-up capital stock and surplus of such state bank or trust company.

Upon receipt of the application the federal reserve agent obtains the approval of his Board for the application and transmits it to the Federal Reserve Board with its report and recommendations.

In passing upon an application the Federal Reserve Board considers especially:

(1) The financial condition of the applying bank or trust company and the general character of its management.

(2) Whether the nature of the powers exercised by the said bank or trust company and its charter provisions are consistent with the proper conduct of the business of banking and with membership in the federal reserve bank.

(3) Whether the laws of the state or district in which the applying bank or trust company is located contain provisions likely to interfere with the proper regulation and supervision of member banks.

If, in the judgment of the Federal Reserve Board, an applying bank or trust company conforms to all the requirements of the Federal Reserve Act and these regulations, and is otherwise qualified for membership, the Board will issue a certificate of approval.

Every state bank or trust company while a member of the federal reserve system retains its full charter and statutory rights as a state bank or trust company and may continue to exercise the same functions as before admission, except as provided in the Federal Reserve Act and the regulations of the Federal Reserve Board, including any conditions embodied in the certificate of approval. Such an institution, however, is required to:

1. Invest only in loans on real estate or mortgages of a character and to an extent which, considering the nature of its liabilities, will not impair its liquid condition.

2. Adjust, to conform with the requirements of the Federal Reserve Act and these regulations, within such reasonable time as may be determined by the Board in each case, any loans it may have at the time of its admission to membership which are secured by its own stock, or any loans to one person, firm, or corporation aggregating more than 10 per cent of its capital and surplus or more than 30 per cent of its capital, or any real estate loans which, in the judgment of the Federal Reserve Board, impair its liquid condition.

3. Maintain such improvements and changes in its banking practice as may have been specifically required of it by the Federal Reserve Board as a condition of its admission, and shall not lower the standard of banking then required of it.

It is expected to enjoy all the privileges and observe all these requirements of the Federal Reserve Act and of the regulations of the Federal Reserve Board applicable to state banks and trust companies which have become member banks.

State banks and trust companies which have accepted membership in the system are permitted to withdraw on twelve months' notice under reasonable prescribed conditions, so that no permanent status results from the action of a state bank in accepting membership.

Advantages and Disadvantages of Membership

From this it will be seen that there is no reason why any state bank may not accept membership in the federal reserve system with entire safety to itelf and with complete reservation of its power to return to its former status. What is the governing motive that ought to control a state bank in this connection? The prudent state banker will, on looking over the ground, probably reach the conclusion that he need not worry about an imaginary fear that his investments in a federal reserve bank will

be non-dividend paying. There are few well-informed persons who doubt that federal reserve banks will, within a reasonable time, pay all dividend claims to their stockholders. The state banker will, however, recognize that the reserve requirements of the Act are likely to involve him in some expense, since, of course, he will lose the interest which he might have got by depositing his reserve money with some other bank at 2 per cent or 3 per cent interest.

As against this it should be remembered that the state bank owes a duty to the community in keeping itself liquid and in a safe position. In some states the legislatures have already cut down reserve requirements to the same level as that fixed in the Federal Reserve Act, but only in a few have they fixed as a preliminary condition that the state banks before taking advantage of these reductions should join the federal reserve system. There can be no doubt that the duty of the state banker is to live up to the old reserve requirements, or, if he wishes to take advantage of the new ones, to enter the reserve system. On this basis he will, in most states, make little sacrifice, even from the direct profit-making standpoint, by joining the system.

The state banker will be likely to find in many cases a more serious difficulty in the fact that there is little use in his joining the system unless he invests a certain proportion of his resources in commercial paper of a rediscountable kind. Of course, good banking dictates that he should do this in any event if he has demand deposits outstanding to any considerable degree. If he has no demand deposits outstanding and does not do a commercial business, there is no especial reason why he should join the system at all. But if he desires to change his style of banking and so invest to some extent in com-

mercial paper in order to have rediscountable assets, he puts himself into quite a new relationship to the banking community. This means a very considerable change in the scope and character of his business, and one which must be an almost necessary concomitant of his accepting membership in the system. The state banker who looks over the ground will also be likely to find that in limiting the amount of his loans to specified persons and in coming within other restrictions of the National Bank Act, he loses a part of his liabilities. In all these particulars he, however, will find membership in the federal reserve system conducive to his safety and soundness as a commercial banker and also tending to strengthen him with the public.

There is a good deal of difference of opinion as to the rate at which state banks will enter the system. Most persons agree that a new period of severe stringency or difficulty will lead many to make application, and that once in, they will remain. Lacking such an impetus, it is quite likely that the movement into the system will be slow, the stronger and better banks and trust companies gradually coming in as conditions favor. If an effective clearing and collection system should be introduced, it is the general opinion that state banks will be practically obliged to accept membership at an early date. Congress may, of course, take action designed to force them into the system.

If the state banks enter only slowly, there will be corresponding retardation in the unification of banking practices throughout the United States; but there will be no reason why the federal reserve system should not efficiently perform its functions, even if no state bank members should join it. However, the attitude of the Federal Reserve Board at the present time is one of

desire that state banks should enter in every case where they are strong enough and in good condition and that the system should enlarge its usefulness by serving the state banks just as it does the national. Meantime, in case it becomes necessary to do so, the Federal Reserve Act provides abundant authority for the board to permit and arrange direct accommodation to the outside banks if circumstances should demand it.

Relations with the Government

Aside from the possible extension of its numerical strength in the way already indicated, there is perhaps no field within which the reserve system may look forward to a more rapid and important expansion of functions than in the performance of the duties assigned to it as fiscal agent of the government. At first it was not thought wise to have the banks exercise this fiscal agency function until they had become fully organized. The performance of this function entailed considerable labor and expense, while with their immense resources there was no reason why the banks should be expected to make a greater profit through the use of government funds than at present. The Secretary of the Treasury consequently deferred action on the fiscal agency question until the banks were a year old, designating them, however, as fiscal agents at the end of November, 1915, such designation becoming effective January 1, 1916.

The arrangements thus far made include merely the transfer of balances heretofore held by national bank depositaries in the thirteen cities where federal reserve banks (and the one branch) are located, to the reserve banks, the aggregate so transferred being some $10,000,000. This, however, is only a beginning. At the present moment the Treasury at all times has on deposit with

national banks between $40,000,000 and $50,000,000. Under the provisions of the Act it is lawful to deposit much more than this, and it may reasonably be expected that before a great while practically all the funds of the treasury, except trust funds (the money held behind gold and silver certificates, and for other special purposes), will be placed in the hands of the reserve banks. Ultimately it may be supposed that the regular and normal balances of the government with reserve banks will run from $200,000,000 to $300,000,000.

The reserve banks, moreover, have begun dealing in government bonds under the terms of the Act, and in their capacity as fiscal agents the Treasury will be able to rely upon them to float any future loans of which it may stand in need and generally to take charge of business relations between it and the community. The Treasury can draw checks upon reserve banks, and when the clearing system has been fully developed, these checks will be, of course, cashable through any member bank at par. In the same way it will be possible for the Treasury to transmit funds collected at any point to the reserve bank of that district by simply depositing them in a local member bank and ordering the transfer made to its credit on the books of the reserve bank through the clearing process. In this way when the system has been fully developed, the present fiscal system of the government will be changed from the placing of isolated and independent cash carried in government vaults or held in depositaries against a pledge of United States bonds, to a system employing modern banking methods and relying upon the check and deposit method of payment, while, at the same time, insuring the retention of its funds in commercial channels at all times.

This change cannot be instantaneously made, but will

require some time to work out. When it has been fully worked out, it will bring about a general service to the government and the banks; but the principal advantage will accrue to the commercial public which will find itself relieved of the pressure which it feels when heavy withdrawals of government funds are made during periods of stringency.

Relations with the Treasury Department

Under the new system relations between the federal reserve system and the Treasury Department will necessarily be of increasing vitality and importance. In the original draft of the Federal Reserve Act it was provided that deposits of funds belonging to the government should be made in reserve banks entirely under the discretion and direction of the Reserve Board itself, and should be withdrawn or shifted in the same way. The final draft of the law left this power of deposit entirely in the hands of the secretary of the treasury, while it further provided that the secretary might, at his discretion, continue to deposit in national banks if he saw fit. Under existing conditions, therefore, close co-operation between the Federal Reserve Board and the Secretary of the Treasury in connection with the management of public deposits will be essential.

It is to be assumed that if the reserve banks render efficient service to the Treasury Department, as it may be expected that they will, the Secretary of the Treasury will, in the manner described above, shift practically all his free funds into them. The only exception to this general statement will be found in those cases where he deems it wise to continue to use national banks as depositaries because of the greater convenience involved in so doing, or because of the existence of some special

and local reason for such use. There is no reason to suppose that such considerations will be very frequent or numerous. In the main the funds will undoubtedly go into the federal reserve banks except so far as it may be thought that a certain minimum supply of cash should perhaps always be held by the Treasury Department in its vaults.

Just here it should be observed that in times past the Secretary of the Treasury's motive for depositing in national banks has been not only that of providing for his own convenience and that of disbursing officers, but also that of promoting the safety of the members of the system by providing them with funds when they were hard pressed. A special, and at times, very beneficial phase of this activity is seen in the so-called "crop-moving deposits," which have been made by the Treasury from time to time in those parts of the country where money was specially needed to assist in the movement of the crops to market. If the reserve banks fully and effectively perform the duty of rediscounting for their member banks whenever the latter are in need of assistance, there will be no reason why government deposits should be placed with them for any such purpose hereafter; on the contrary, the making of such deposits will, under ordinary circumstances, be of doubtful wisdom. If, of course, a condition should arise in which a federal reserve bank was unable to extend aid to a member institution which was entitled to such aid, in the interest of the community the Secretary of the Treasury might make a special deposit, but it is difficult to see how such action would benefit the member bank more than an equal amount of cash placed with the federal reserve bank and by it used as the basis of rediscount in behalf of the member bank. Gradually, therefore, as

the system expands and develops, it may be expected that the Secretary of the Treasury's power of withdrawal will be less and less frequently exercised and that his power of depositing with member banks directly will be called into play only sporadically.

There is only one exception to the proposed general rule that at this time appears likely to take effect. As has been seen in the foregoing treatment from time to time, the Federal Reserve Act is based upon the thought that the resources of the several reserve banks can be practically thrown together at will by a process of rediscounting under the direction of the Federal Reserve Board. That is to say, the Federal Reserve Board, since it possesses the power of fixing a rate of rediscount between federal reserve banks and of directing one federal reserve bank to advance funds to others, practically has the power to throw the resources of two such banks together. It is conceivable that a Federal Reserve Board might fix a rate of discount so high as to discourage such aid at a time when a Secretary of the Treasury thought it was desirable or necessary. In such an event, it may be assumed, a Secretary of the Treasury, by shifting deposits from one reserve bank to another, could supply the needs, or what he supposed to be the needs, of a reserve bank and of the community, without waiting for the development of rediscounts under the guidance of the Reserve Board. Granted a normal and reasonable rate of discount between federal reserve banks, it may be supposed that such a condition as this would never occur; but it nevertheless remains true that under the Act as it stands, the Secretary of the Treasury has at all times the power of reducing or increasing the funds at the disposal of any given reserve bank by the simple process of shifting the public deposits from or to such

bank as the case might be. Should this action be taken at a time when the amount available for deposit was large, the power exercised would be correspondingly large.

Development of Commercial Paper

Thus far we have spoken most largely of questions relating to the organization of the federal reserve system, its structure and membership, and the probable development thereof in the future. What is likely to be more important in the future work of the system than any of these matters, however, is the growth and change resulting from real advance in commercial practice. The Federal Reserve Act recognizes the existence of many kinds of commercial paper in the United States and permits the advancing of funds upon so-called "single-name paper," as well as upon "two-name," where the operation to be financed is a productive one. The Federal Reserve Board in its regulations thus far has recognized this state of affairs and has provided for the discount of ordinary single-name paper, properly indorsed and protected, as well as for ordinary bills of exchange, bankers' acceptances, "commodity paper" (that is to say, paper protected by receipts evidencing storage of satisfactory kinds of marketable staples, etc.), trade acceptances, and other varieties of paper. While all these classes of paper are, however, admitted under the terms of the Act, a reading of the statute makes it plain that the law evidently contemplates something very different in the future development of paper—nothing less than the growth of a discount market for bills.

In the United States a widespread practice of commercial settlement, very different from that prevailing abroad, has been developed. For example, B may buy

goods from C on 90 days' time. C "charges" the goods to B on his books. Then at the end of 90 days he bills the goods to B, and the latter pays. If B happens to have the funds to meet his bill before the 90 days are up, he may be allowed a "discount"; or the terms of his agreement may be so much for cash within 30 days or longer, as the case may be, which means that the goods are carried on open account, and if they are settled for within a specified time, a given discount is deducted. In this case, there is no commercial paper whatever. There may be a variation of this type of transaction whereby C asks B for a "note" as soon as B gets the goods—that is, B takes the goods away and gives a note for 30, 60, or 90 days. In the former case, C may get accommodation at his bank by making a statement which shows that B owes a certain amount, and so gets his bank to finance him, or, if B has given the note, may indorse it and get his accommodation in that way. In either case, it is not likely that the bank could dispose of B's or C's note to very good advantage. In Europe the transaction would have been consummated by C's drawing upon B, whereupon B would accept the draft. Then this draft could be discounted at a bank or sold to someone who wanted an investment of funds for the life of the draft. Or, again, C might have agreed with B that the latter would pay him in a draft accepted by a banker. Then B would induce his own banker to accept C's draft when it was drawn. This would be a bankers' acceptance—a kind of paper very popular in foreign countries.

The spirit of the Federal Reserve Act is strong in favor of the development of this kind of paper and of the older double-name type of paper, whether indorsed or unindorsed. Much of the success of the Act will depend upon the extent to which the desired change in the

method of making commercial paper is applied and developed. At present there is undoubtedly great hesitation on the part of American business men about abandoning the open account and single-name method of settling; but it may be supposed that if lower rates can be made to them on the new basis, they will adjust themselves to that basis more or less speedily.

Foreign and Domestic Acceptances

The points at which the deficiencies of our present method of settling is most obvious are seen in the development of our foreign trade. In other countries almost all foreign trade is financed on a basis of bankers' acceptances, drawn in the way heretofore explained. For instance, suppose that A in Liverpool buys wheat from B in Minneapolis. A agrees with B that he will pay for the wheat by getting the Bank of Liverpool to accept B's draft at sight. This means that B at the time that he ships his cargo of wheat draws a draft on the Bank of Liverpool (arrangements with which institution have already been made by A), and this draft accompanied by the shipping documents can then be discounted at a bank in Minneapolis. The Minneapolis bank knows that the draft is equal to a promise on the part of the Bank of Liverpool to pay and that if this is not made good at sight, it can withhold the delivery of the wheat through its correspondent in Liverpool, so that it is protected to the extent that the wheat has value. Under the old system of financing foreign trade, an American buyer who bought, say, woolen goods in England, had to arrange to borrow directly at his bank, say in New York, in order to get funds to remit. This process was much more clumsy, the paper was limited in its market, and, due to the fact that A's signature was not widely known, his

note could not be generally sold. He consequently had to pay a higher rate of interest for his accommodation.

There were many other objectionable effects produced by this situation, but the one just mentioned was of itself enough to condemn the system. It was for this reason that the Federal Reserve Act made provision for permitting national banks to accept bills growing out of importations and exportations to an amount equal to their capital and surplus. There was strong pressure upon Congress to extend this provision to domestic bills of exchange, but such action was never taken. However, a number of states, conspicuously New York, have since then provided for the accepting of domestic bills of exchange by state banks, and the Federal Reserve Board has permitted federal reserve banks to purchase from state banks and others such accepted drafts growing out of domestic transactions, through the exercise of the open-market powers of the federal reserve banks. It is probable that when the acceptance system has been fully developed, there will be a disposition to permit national banks also to accept in domestic transactions, provided that the drafts so accepted are accompanied by the documents. If such provision should be made, the bank acceptance would become fully applicable to domestic as well as foreign trade, and the result would be that the same interest rates and the same breadth of market, in corresponding degree as in foreign trade, would be obtained by all business men in their domestic operations.

Question of Branches

Closely connected with this whole subject is the question of branches. The Federal Reserve Act provides for the operation of branch banks abroad by member banks possessing capitals of $1,000,000 or more, pro-

vided that such banks apply to the Federal Reserve Board for permission to establish such branches. This provision of the law was adopted on the supposition that a considerable number of banks would probably take advantage of the provision of the Act to establish themselves in foreign countries. Thus far only two have done so, and other banks have explained their failure to take any action by pointing to the hazards of branch banking in foreign countries at the present time, in view of the instability of exchange and of currency systems abroad; by asserting that much better results would be obtained if they were permitted to join together for the purpose of establishing corporations which would create such branch offices abroad, thereby limiting their liability to the amount that they had invested in such corporations; and by suggesting that the field of action had not been well divided between member and federal reserve banks in foreign operations.

There is something, no doubt, to be said in all these respects. Not a few banks have been of the opinion that federal reserve banks would do well to break the way by proceeding with the establishment of these branches abroad, thereby perhaps rendering it easier for member banks to ascertain whether there was a real field for them. On the other hand, the banks have feared that this would be dangerous competition and have thought it not desirable to have such a step taken by federal reserve banks, believing the first step to be arranged should be the modification of the Federal Reserve Act in such a way as to permit united action by banks of the kind just referred to. There has been a great deal of effort to make a start at some point, and the subject was quite fully discussed during the Pan American Financial Conference held in Washington in May, 1915.

In reporting to the President on the situation as created, Secretary of the Treasury McAdoo, under date of September 6, 1915, said:

The Federal Reserve Act has so consolidated and organized our credit resources that our bankers are, for the first time in our history, able to engage in world-wide financial operations. We now have the available resources. It is merely a question of their intelligent use.

The first step should be the establishment of the necessary branches or agencies in the leading cities of all the countries of South and Central America by a bank or banks having the necessary resources to take the business that is open to them. One of our largest banks has had the enterprise to establish branches in some of the largest cities in South America, but manifestly the resources of a single bank or of several of our largest banks are insufficient to meet the demands of the situation as it now exists and as it will develop in the future. What is needed is the use of the consolidated banking power of the United States applied through agencies established in the leading cities of Latin America.

The Federal Reserve Act has supplied the necessary authority, and it only remains for the federal reserve banks, with the approval of the Federal Reserve Board, to make practical use of that power. Section 14 (paragraph e) of said Act gives every federal reserve bank the right:

"To establish accounts with other federal reserve banks for exchange purposes and, with the consent of the Federal Reserve Board, to open and maintain banking accounts in foreign countries, appoint correspondents, and establish agencies in such countries wheresoever it may deem best for the purpose of purchasing, selling, and collecting bills of exchange, and to buy and sell with or without its indorsement, through such correspondents or agencies, bills of exchange arising out of actual commercial transactions which have not more than ninety days to run and which bear the signature of two or more responsible parties."

In addition to these powers, the federal reserve banks may, "under rules and regulations prescribed by the Federal Reserve Board, purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities by this Act made eligible for rediscount with or without the indorsement of a member bank," and may "deal in gold coin and bullion at home or abroad, make loans thereon," etc., and "buy and sell, at home or abroad, bonds and notes of the United States," etc. Enlargement of these powers would be desirable to increase the usefulness of foreign agencies of federal reserve banks, and it is probable that the Congress would grant such enlarged powers upon good cause shown.

The twelve federal reserve banks could, with the consent of the Federal Reserve Board, establish joint agencies in each of the countries of Latin America, their interest in such agencies to be in proportion to the capital stock and surplus of each participating federal reserve bank. The combined capital stock and resources of our federal reserve banks, utilized in this way for the extension and promotion of our foreign commerce, would give them unrivaled financial power. They could maintain themselves in foreign fields in competition with the world and perform a service of incalculable value to the American people.

Subsequently the whole subject was discussed by the Federal Reserve Board, and a committee report was submitted to the Board for the purpose of outlining more in detail the precise field which should be occupied by the federal reserve banks and their relations to the operations of member banks.

The committee report expressed the view that federal reserve banks—being custodians of the reserve money of the member banks—should not be permitted to do pioneer work, granting credit facilities which would lead to a lockup of reserve money in loans which, in most of

the cases, would be subject to wide fluctuations of foreign exchange. Recommendations for joint agencies of federal reserve banks did not contemplate this character of operation.

The large government banks of Europe do not go into foreign fields except that they hold, as secondary reserves, foreign bills on the most important European countries where large discount markets exist and where the gold standard is established beyond question. In those countries, these government banks maintain correspondents, and it was believed that, when normal conditions should be restored in Europe, joint agencies or correspondents could be used to good advantage there. The committee also called attention to the fact that England, Germany, and France have established independent banks or branch banks of deposit banks in Latin American countries to do pioneer work and that the United States should pursue the same course, inasmuch as it is necessary for banks going into this field to have the widest possible range of activity in order to be able to compete with the local banks and the branches of the foreign banks already established in these fields. Federal reserve banks being properly restricted to certain transactions and such as may not interfere with the absolute liquidity of their condition, could not compete successfully in this respect, whereas it should be their function to do all in their power to assist American banks which enter the Latin American field.

The committee favored an amendment of the Federal Reserve Act which would enable American member banks to co-operate for the purpose of jointly owning and operating foreign banks. The contribution of the federal reserve banks in this development in Latin

America would primarily consist in providing conditions so favorable for American acceptances that the American banks willing to offer credit facilities there would be materially assisted in meeting the European rates which, at the present time and probably for some time to come, will compare unfavorably with the American discount rate.

It was of course recognized that wherever the federal reserve banks can help in the development of American banking by establishing direct connections in Latin American countries for the purpose of facilitating discount operations of this kind, it will be their proper function to do so.

The committee took the position that American banks entering this field ought to be permitted to develop the opportunities first, but that, in trade centers where American banks are not established, it might be proper for the federal reserve banks to appoint joint correspondents or agents in order to facilitate the development of American acceptances in such places, although the resources of the federal reserve banks should not be invested in non-liquid loans in Latin American countries or elsewhere.

Up to date no branches of federal reserve banks have been established in any foreign country. At present, therefore, the situation is that member banks may establish foreign branches subject to the provisions of the Federal Reserve Act and that two have done so, while the Board has officially announced itself as favoring the legal recognition of co-operative unions of the banks for the purpose of establishing foreign agencies. It is to be assumed that federal reserve banks will establish branches abroad as soon as conditions in foreign mar-

kets have become rather more stable, so as to permit such action with a fair degree of safety and security.

Use of American Banking Resources

Since the beginning of the European war the general banking question has greatly broadened and amplified itself, and perhaps the greatest problem to be considered now by the banking system of the United States and those intrusted with its leadership, is the use to be made of its resources in meeting the unusual and extensive demands that are being brought to bear upon it, and will be increasingly brought to bear in the future in view of the destruction of capital in Europe. Of course, it is a primary necessity to protect and safeguard the domestic banking situation and to see that every legitimate need for short-term capital is supplied. But it remains true that an unprecedented burden has been laid upon the financial institutions of the United States in connection with the financing of American foreign trade. This duty includes both the immediate matter of providing financial support for the present export trade and of furnishing later on the necessary facilities to keep and, if possible, extend this trade after the war is over and after business conditions have been restored to something like normal.

At the beginning of the struggle Europe took our goods and paid us by cancelling our floating indebtedness on open account; later our goods were taken and were paid for by the shipment of American securities, which were converted into means of payment through sales in the United States. At length there has set in a period in which Europe still desires to obtain our goods, but would do so upon a basis of credit accounts with the United States. The situation is one that pre-

sents unusual and perplexing problems of policy and at least suggests the possibility of difficulties in commerce, trade, and industry that may cause hardship if not courageously and skillfully dealt with.

Financing Exports

The United States is in a position which requires it in its own interest to finance its exports to foreign countries. We cannot indefinitely say to these foreign countries, "Pay us in gold," or even, "Pay us in our own securities." To some extent both these methods of payment undoubtedly will be adopted, but there are practical limits upon each. Even if seeking to get gold we should not, as a European statesman has recently said, "absorb the monetary systems of Europe," or even weaken them by so far sapping their underlying structure of gold as to embarrass future financial relations with such countries. We may ask that our securities shall be returned to us so far as possible, or at least such an amount of the securities as are within reasonable reach. If we were to insist upon either gold or American securities as a means of payment for exports, it may be questioned how far our exports would go.

Curtailment of exports might not be a matter of national concern if they were limited solely to the extraordinary orders which have grown out of the present war, but this is not the case. To many foreign buyers the war-order purchases seem more urgent than the ordinary requirements of commerce, and given a choice between the two, it might be the latter that would suffer. Were we to refuse to finance our own foreign trade at its present volume, might not the reduction of the trade be seen in a curtailment of shipments of cotton and many other commodities which to us appear as staples,

but which to foreigners engaged in a life and death struggle are things that can for a time perhaps be dispensed with, or whose consumption may be reduced? We cannot discriminate between the different classes of exports which draw upon the banking machinery of the country for the means wherewith to supply a financial basis for their movement. Could this be done, and could we be the determining factor as to the classes of exports which we would preferably finance, the situation would be different. The fact is that our sales are determined by demands abroad, and that we supply what our customers call for. If we limit their consuming power too drastically, the question will remain at what point and upon what lines of goods they will begin to curtail the purchases they make; and this, in the last analysis, is not a matter over which we have control.

Long-Term Credits Necessary

We shall ultimately have to decide in our own minds about how far we are willing to grant accommodation to foreign buyers of our goods of every description. Usually, of course, these buyers have expected to pay us by short-term claims upon goods manufactured in their own countries and shipped to the United States, but these goods are now greatly reduced in volume. The productive power of most nations has been devoted to the manufacture of munitions of war or to the actual maintenance of armies in the field. They are not in a position to produce the goods which we have asked for in the past and which today we would stand ready to take as a means of payment for our cotton, grain, meat, and manufactures. It may almost be said that in this way every class of foreign purchaser is practically in

a position in which he is dependent upon the getting of a long period of credits.

As has already been said, how long such credit shall be, and what shall be its nature, is a matter which American business men and bankers must thoughtfully ponder. There is no disguising the fact that what Europe is now asking for is a general power to draw upon our resources of consumable goods, which means a request for power to employ our productive machinery simply upon the promise ultimately to pay us back when circumstances will permit. Were we to insist on payment either in gold or in securities, we should, to a very great degree, limit our own earning power and to that extent throw out of gear our means of production. We have in the past depended upon Europe to take from us each year several million bales of cotton and many millions of bushels of grain. We cannot now interrupt this existing process without seriously checking the production of the United States. And yet, of course, we must set a limit to our sales abroad, based on what we believe to be the power of our customers in other countries to pay for the goods that are supplied them.

Obligations upon the Banks

The banking phase of this question is even more important perhaps than the commercial. It is evident that we cannot carry more than a certain amount of foreign credit as an element in the liquid assets of our banks. Were they to become too largely involved in this way, it would be easy for them to pass from the present condition of abundant liquid resources to the opposite situation. Let it be borne in mind that the United States has been a borrowing and not a lending country. If it now assumes the functions of financing great quantities

of foreign obligations, it must do so with the knowledge that such operations imply the withdrawal of a more than proportionate amount of capital from the permanent uses that have heretofore called for them. Our banks have a duty to perform in keeping their funds liquid and in avoiding any course that could be held to limit their power of meeting unexpected financial necessity on the part of the borrowing public of this country.

The obligation thus resting upon the banks is the greater because of the fact that for some time to come they must undoubtedly provide for an immense quantity of domestic products, cotton, grain, and the like, which in years past has been financed abroad, but which now must be carried by American capitalists because of the fact that foreign countries are turning so generally to this nation for aid in the transaction of their ordinary business. Certainly this necessity of financing will be met with in the case of all those products of which a large supply must be carried over a long period or season, awaiting the development of actual demands abroad. They must remember that unusual necessities in the interior of the country, as well as unusual demands from elsewhere, are confronting them and that their ability to supply all legitimate requirements of regular trade will be in no small degree measured by the extent to which they husband their resources in connection with abnormal or unusual demands.

Responsibilities upon Business Men

Our business men and manufacturers have themselves a very heavy responsibility at the present time. Past experience shows that financial prosperity, due to disturbed or unusual conditions, not only does not last, but is usually followed by reaction and loss. There were

many persons just before the close of the Civil War who imagined themselves possessed of enormous wealth, but who, in fact, found that the collapse of values following the war, left them with hardly any of the property they had imagined themselves to have. It would be easy for the United States to expend its wealth in plant and manufacturing equipment for the purpose of taking advantage of what seem like profitable orders from foreign countries, only to find when peace returns that much capital had been invested without any reasonable prospect of continuous employment for the future.

No doubt there are some concerns who are so fully protected by the terms of their contracts that they can afford to invest in this way, even if the extension of plant and equipment which they may make should be practically unavailable after the war is over. Their profits may be so large as to safeguard them individually against the possibility of loss. The fact will remain, however, that the capital of the community has been devoted to a use which has proved only temporary and that the plant and equipment provided by the use of such capital are not available for continuous working because of lack of demand for the products which it turns out. In such a case the resources of the country would have been, so far as immediate advantage goes, destroyed; and in place of them, the nation as a whole, would have received simply a claim upon the future industry of other nations which, at best, would be a long time in being realized. It is easy to see that we have here the elements of a process of inflation and speculation which might be carried to great length should the abnormal conditions of business in the United States continue and should the trade with Europe be placed upon a footing of unsound or exaggerated credit.

Dollar Exchange

The United States can do much to finance itself, meet European demands for goods, and, at the same time, occupy a safe position by undertaking the normal financing of ordinary trade with neutral nations, which has heretofore been conducted by foreign financiers. This could be done by the more general adoption of dollar exchange in international trade. If London, for example, is willing to turn over to New York the function of accepting against South American, Eastern, and other purchases, the merchants and banks of this country may relieve European financial institutions of a considerable part of the burden resting upon their resources by providing for the requirements of their ordinary trade. Were the banks of the United States to assume this function, they would relieve the banks of Great Britain of a drain upon their resources, which would enable them to accommodate the requirements of the temporary abnormal trade of their own country.

The United States would, however, have gained the advantage of developing a normal accepting relationship with many parts of the world, where this branch of business must, under ordinary conditions, be slowly built up by us, if at all. American bankers must enlarge their support of neutral and normal trade to the utmost limit, assiduously working to maintain the assets of their institutions in as liquid a condition as possible and refraining from the purchase of an undue amount of any class of paper which requires an extra long term for liquidation.

In all this the federal reserve system has no doubt an important part to play. It must, above all things, conserve its resources for the liquid commercial trans-

actions whose financing it was originally designed to carry. It must be prepared to supply accommodation at every point where possible friction or difficulty may occur, and to this end it must co-operate actively with member banks in rediscounting paper of suitable kinds wherever such action is necessary in order to meet a general public demand. It must, above all things, endeavor to encourage the member banks in the policy of conservative development and of caution with respect to unfamiliar operations, as has been outlined. It must safeguard with peculiar care the interests of the productive communities of the United States.

The federal reserve banks are frequently spoken of, and no doubt correctly, as bankers' banks, but they are bankers' banks on the public and not on the private side. They are bankers' banks so far as the bankers perform a public service; they are not bankers' banks so far as bankers are in search primarily of their own profit. They are bankers' banks in the sense that they work through bankers for the purpose of equalizing supplies of capital and rates of interest and of conveying to the public—manufacturers, merchants, and farmers—all those benefits that result from united and uniform financial action.

TEST QUESTIONS

1. What may be said to be the central idea of the federal reserve system?
2. Why were powers to engage in open-market operations given to the federal reserve banks? Explain how these powers rest on experience.
3. Explain the two theories commonly held as to the proper functions and activities of the reserve banks. What is the evident intention of the statute?

4. Under what conditions may state banks enter the reserve system?

5. What are the advantages to state banks of membership in the system? The disadvantages?

6. From the standpoint of our national banking system, is it desirable that state banks should become members? Why?

7. Explain the provisions that have been made for the reserve banks to act as fiscal agents of the government.

8. Show how the Federal Reserve Board, through the process of rediscounting, can, for practical purposes, throw the resources of two or more reserve banks together.

9. What are some of the classes of commercial paper admitted under the Act for advancement of funds? What are some of the immediate problems in this field?

10. How do commercial transactions on open account differ from transactions evidenced by bankers' acceptances?

11. Explain the process of settling foreign accounts by means of foreign acceptances. Illustrate.

12. What provisions does the Federal Reserve Act make for enabling our banks to aid in the financing of foreign trade?

13. What two provisions does the Act make for branch banking abroad? What are some of the immediate problems to be faced in this field?

14. What were the recommendations of the committee report submitted to the Federal Reserve Board on branch banking in foreign countries?

15. What are some of the banking problems created by the large war exports?

16. What are the developments with regard to dollar exchange?

17. In what sense are federal reserve banks bankers' banks?

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